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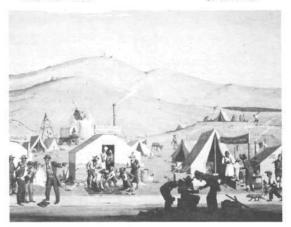
"THE MINING TOWN" BY CLYDE FORSYTHE (see page 2)

CUYDE FOREYTHE - 38 -

A MARINE WAS

The Gold Rush

June cover



The Mining Camp

July cover



The Mining Town

This month's cover



The Ghost Town

September cover

ON THIS MONTH'S COVER:

THE MINING TOWN

THE THIRD PAINTING IN THE FAMOUS "GOLD STRIKE"
SERIES BY THE DISTINGUISHED
WESTERN ARTIST

CLYDE FORSYTHE

The 1926 Gold Rush to Wahmonie is over; the tent city Mining Camp has come into being; and now it is time for lumber to replace canvas, for the Mining Town to take its place under the Nevada sun. But Wahmonie fails to reach this pinnacle—the gold vein disappears—the boom fizzles—the camp dies.

The artist, ever resourceful and licensed to portray "essential truth" (in this case: gold strikes become mining camps and then mining towns), decides to do what the miners could not: create a town. In the following chapter, Clyde Forsythe tells how he came to paint "The Mining Town."

UR WEEK AT Wahmonie, Nevada, had paid off in rich experience. I realized that I had been most fortunate in having participated in that rare event: the start of a gold strike. But there was no thought as yet of doing a painting.

We sent a wire to my wife's brother-in-law, Harold Gay, a mining engineer working in Mexico. Gay joined us in Southern California for a jaunt back to the camp to sample our claims. Cotta's sister, Anabel Gay, went along. Going by way of Las Vegas, we made the trip in a day.

In the two weeks we had been away, the camp had grown. The cafe had moved to higher ground and was screened in. Very fancy. Mr. Minette had put up an office and invited Gay and me to sleep in it that night. Our wives slept in the luxurious Franklin, a modest distance from the "congested area." At 2 a.m. Gay's cot collapsed and dumped him on the board floor. My iron bed was sturdy.

After a breakfast at "The Palace" we got into the Franklin, and with Davis and Ryan following in their wheezy little Chevie, we proceeded up to our claims. Harold Gay had been mining for 25 years. We walked the claims end to end for several hours, taking samples of small outcrops, mostly jasper and quartz with a few white streaks. With ore sacks filled, we returned to camp. Then Gay paid a visit to the "strike" operation where the boss gave him a sample of the rich ore. It looked good to his expert eye.

Because Gay's time was limited, we said our "good-bys" to our friends in camp and headed for home. We decided to return by way of Death Valley, which none of us had ever seen, and we followed a road to Death Valley Junction where we spent the night at the hotel.

Next morning — Easter Sunday — found us rolling down Furnace Creek Wash, stopping now and then to pick up float. Gay found a chunk of fossil coral, proof that these mountains were once under an ocean bed.

In 1926, Death Valley roads were winding trails of sand—and the wind! We passed roadside graves—wagon wheels—bones. It was a good place to leave behind, and it took the rest of that day to get out—past the borax mill, through the Amargosa Valley and into the hills at the southern-end of the Valley. Then through the black night, past Garlic Springs and on to Barstow for a late dinner—and home.

This episode has to do with "The Mining Town," the third



THE ARTIST, LEFT, AND GEORGE SAUNDERS, WAHMONIE'S "LOCAL LAW" IN 1926, SAUNDERS HAD BEEN A BOUNCER FOR TEX RICKARD.

painting in my Gold Strike series; but no town sprang up at Wahmonie! I had our ore samples assayed in Los Angeles. They ran 25c to the ton in gold! Not rich enough to pay for the shoe leather we used in picking them up!

No town grew in Wahmonie because within three short months George Wingfield's crew came to the end of the vein of good ore, drifted a few yards—and pulled out of camp. Everyone else followed, leaving what they could not carry to the lizards, coyotes and the buzzards.

Our \$170 lot has a 34-year-old growth of new creosote bush. Our

claims are gone with the wind. But our memories are rich.

In 1938 I painted "The Gold Rush" from those memories. A year later, after showing the picture in Los Angeles at the Biltmore and in the Allied Artists of America show in New York, the idea came to me to paint "The Mining Camp," using the same characters, of course, as in "The Gold Rush." This I did, and a few years later "The Mining Town" demanded to be painted—again with some of the same characters . . . the slim gambler and his gal-friend, the prospector with his burro. . The man shaking his fist at the tipsy fellow is myself, scolding a certain friend of mine.

By now we had a house trailer, and to get material for the "Town" we headed one day for Randsburg and Red Mountain on California's Mojave Desert. The old stores and saloons and mine mills were there to be used at will. I sketched the stores and the church at Randsburg, the Kelley Mine at Red Mountain, and into the painting they went. They are real. The gambler and his dame seem to have prospered and are waiting for the stage to take them to Los Angeles for a high old time.

After all, this is how Wahmonie might have looked if the "big strike" had turned out to be another Goldfield —or a mine like Randsburg's fabulous Yellow Aster. When I was a 14-year-old at Elizabeth Lake, I heard the homesteaders talk of the Yellow Aster.

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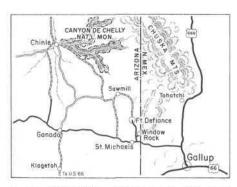
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CANYON DE CHELLY - - Beauty at the End of the NAVAJO RAINBOW

By THOMAS LESURE

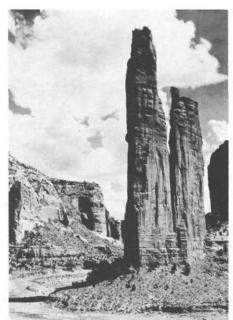
Desert Magazine's Arizona Travel Correspondent



TO SPANISH settlers some 250 years ago and to Kit Carson a century-and-a-half later, Canyon de Chelly was just another obstacle in the struggle to eliminate the Navaio menace of costly and murderous raids. To the Navajos, though, this highly scenic National Monument has been and still is "home."

During the ages, three distinct Indian cultures have dominated these sheer red sandstone canyons. Earliest were the Anasazi who built pithouses around 350 A.D. In later centuries, Pueblo Indians erected elaborate apartment - cities such as Antelope House, Standing Cave, White House Pueblo and others. Today, some 300 Navajos, living in summer hogans, pasture their cattle on the canyon bottom.

Canyon de Chelly certainly is much easier to reach nowadays than in Carson's time, yet it remains an off-the-beaten-path destination as far as most travelers are concerned. To those who like their West uncrowded,



800-FT. SPIDER ROCK, NAVAJOLAND LANDMARK

the canyon is a blessing; yet it's a shame that more people don't include this high plateau country in their itinerary.

Nearest main-line departure point is Gallup, N. M., on U.S. 66. The canyon may also be reached from Holbrook via the reservation route to Keams Canyon. Since the Canyon de Chelly turn-off point is just west of Ganado on Reservation Route 3, the gorge is a logical addition to any trip across the Navajo and Hopi Reservations. The 33-mile drive over a dirt road north from Route 3 brings you to Chinle, one mile away from the national monument

If you depend entirely on your car for transportation, your sightseeing will be limited in this 83,840-acre preserve. Main route is Rim Drive Road which—despite its relatively short length—manages to show off a representative array of the section's Indian ruins and awesome formations. Best methods, however, are hiking into the canyon or taking a half-day or full-day trip along the canyon bottom. For the latter, the Thunderbird Guest Ranch operates special vehicles that negotiate the tricky floor of the gorge. Minimum effort should be the self-guiding trail to the White House ruin which stands like bared teeth in the red lips of the sheer canyon wall. Park rangers are on hand during the day to assist you. And if you'd like to linger, there are camp and picnic grounds.

The National Monument actually embraces three canyons — main gorge is 27-mile-long Canyon de Chelly with its smooth weather-stained walls rising some 700-1000 feet above the river. The other two gorges are Canyon del Muerto (so named because of the Spanish massacre of Indians there) and Monument Canyon near which Spider Rock and Face Rock-two giant monoliths some 800 feet high—rear from the canyon floor like natural skyscrapers taller than New York's Woolworth Building.

The breath-taking scenery is the chief reason for visiting Canyon de Chelly, but you must never lose sight of its historic implications. For here-in a section celebrated for both its scenic and historic elements-you can open the book, so to speak, on the march of Indian civilizations in Arizona from prehistoric times to the pres-

Yet there is more, too-the grandiose work of nature plus a sense of limitless time and space. Within just a few hours, time and space. you are dwarfed to insignificance, crowded by fortress-like walls protecting hidden treasures, awed by the overwhelming majesty of magnificent rock formations, crowned the "king" of all you survey, inspired by the handiwork of the Lord, and given a new outlook on life and your role upon this earth.

Give yourself sufficient time, meet the canyon and feel the impact of all its implications, and you'll understand why the Navajos pined away in their exile at Bosque Redondo. For, like them, once you leave the area, you'll want to return—not to live, perhaps, but surely to linger longer.

Here's this month's schedule of events in Arizona: Aug. 5-7—76th Annual Payson Rodeo (billed as the world's "oldest" Wild West show); Aug. 6-7—12th Annual Square Dance Festival, Flagstaff; Aug. 13—41st Annual Smoki Ceremonials at Prescott (white men re-enact Indian dances); Aug. 15-Sept. 18-Indian Artists Exhibit at the Museum of Northern Arizona, Flagstaff; Aug. 28-30—Coconino County Fair, Flagstaff; Latter part of August-Hopi Snake Dances (for exact dates, set 16 days before the ceremonials, write to the Winslow Chamber of Commerce).

One California event of special interest in August: The Old Miners Burro Race at Apple Valley, Aug. 4-7.



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LETTERS FROM OUR READERS

Comments on the "Heat" Issue . . .

To the Editor: Mary Jones Blackwell's "desert ordeal" in the July issue was a fascinating story. In fact it read like fiction. Why no picture of the woman who was lost on the Mojave Desert for five days in 1947?

JAMES ARMSTRONG Chicago, Illinois

(See below for a recent photograph of Mrs. Blackwell which arrived too late to be included in our July issue.—Ed)



MARY JONES BLACKWELL

To the Editor: I cannot refrain from making a few comments on the "Desert Ordeal" story. The participants admitted making mistakes in judgment, the worst of which, in my opinion, was allowing their misadventure to appear in print.

They ventured on and on into the desert without enough gasoline to bring them back even had they not gotten stuck in the sand.

They carried no drinking water.

They back-tracked 18 miles to water (the one and only act of good judgment shown throughout)—and then instead of walking on to the highway (12 miles) they doubled-back to the stalled car, and took-off for a seemingly green spot in the desert without blazing a return trail!

In my wildest flight of imagination I cannot conceive of two people breaking all the rules of survival and surviving.

> L. C. DeSELM San Diego, Calif.

To the Editor: I compliment you on the exceptional interest of your July "heat" issue. I do a fair amount of roaming by four-wheel-drive vehicle in the Death Valley region and found your articles interesting and accurate.

I would, however, like to take mild issue Continued on next page Volume 23



Number

-- magazine of the Outdoor Southwest --

CHARLES E. SHELTON publisher

EUGENE L. CONROTTO editor

EVONNE RIDDELL circulation manager

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LETTERS -- Continued from preceding page

with Harold O. Weight's statement in "A Summer Visit to the Panamints" that a "bragging time" for the hike up Telescope Peak from Mahogany Flats of two hours is "doubtful." I know definitely of a 1-hour 53-minute climb earlier this year on a cold day by a young member of a mountain rescue group who is a former college distance runner. Faster time yet could be made by running part way, or by a stronger hiker.

GEORGE H. BARNES China Lake, Calif.

To the Editor: I have read the July issue of Desert Magazine, and I want to express my appreciation to you and your staff for publishing such a fine edition. You certainly are to be complimented.

GRANVILLE B. LILES, Superintendent Death Valley National Monument

To the Editor: I have been a subscriber to the Desert Magazine since January, 1939, and have all the copies in binders. I wish to compliment you on the July issue. My wife and I have visited Death Valley several times. At no other place in the desert are the various colors so beautiful and changing as in this National Monument.

C. F. ROMIG Los Angeles

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16021 DENVER AVENUE GARDENA, CALIFORNIA Phone DA 3-4757 To the Editor: My very best thanks for the story by Weldon Heald in the July issue: "With Patton On Desert Maneuvers." Heald is the foremost writer in the Southwest. I shall preserve this copy of Desert.

PAUL J. LINSLEY Whittier, Calif.

V

To the Editor: I buy Desert Magazine at the newsstands, and have not missed an issue for years. I think the July issue on "Heat" was the best of them all.

M. F. CLARK Whittier, Calif.

To the Editor: Perhaps it is because I know personally the writers of the majority of the articles in the special July issue, and possibly because I'm somewhat familiar with Death Valley, but in my opinion this was the most interesting and informative issue of Desert in the history of the magazine.

In this day of "modern" art, I particularly appreciate the realism of the cover paintings by Clyde Forsythe.

NATT N. DODGE Santa Fe

To the Editor: I must congratulate you on the wonderful special July edition, featuring Death Valley and heat. The stories are most interesting and will be read many times. Having lived in Nevada for 45 years, and being very familiar with Death Valley, I thoroughly enjoyed your coverage. Keep up the good work, you are doing a splendid job.

MRS. PEARL C. ERICSON Lovelock, Nevada

To the Editor: The July issue was worth the price of a year's subscription. The story by Harold O. Weight, "A Summer Visit to the Panamints," described a most interesting trip.

WALTER S. YOUNG Genoa, Nevada

To the Editor: Last Christmas I received a gift subscription to your magazine. I have enjoyed every issue so far received, but I believe the July issue surpasses them all. Thank you for a wonderful magazine.

FLORENCE MILLER North Hollywood, Calif. Lee's Ferry in 1925 . . .



To the Editor: The story in the June issue: "A Visit to Historic, Out-of-the-Way Lee's Ferry on the Colorado" brought back memories of our crossing at Lee's in 1925.

The photo herewith is of our '23 Buick helping to pull the craft across the river.

LAURA ARMER Fortuna, Calif.

Lost Mines, Continued . . .

To the Editor: F. L. Kistner, the reader who said he was only interested in lost mine stories (July "Letters"), should be told that there is more than one kind of treasure to be found on the desert.

They are treasures of faith, peace and understanding; self-assurance and contentment; the fellowship of congenial friends; a deeper appreciation of the wonders of nature; esthetic pleasure in the beauty of a desert sunset; the music of a bird song.

You can find a new awareness of the meaning of life itself buried deep in the sands of the desert. It is a fascinating search, and with increasing clarity *Desert Magazine* pin-points the way.

ELSIE A. HAGLE Ramona, Calif.

N

To the Editor: I too am interested in lost mines and buried treasure—in fact I have done quite a bit of study and research on the subject—but unlike Mr. Kistner I believe "pretty rocks, flowers, snakes, lizards, etc." have as much to do with the desert as mines and treasures. In fact, some of the greatest producing mines were accidentally discovered when a prospector wandered off to examine a desert phenomenon other than an outcrop.

Keep up the good work.

HAROLD H. WILLIAM Concord, Calif.

Protect the Devil's Playground . . .

To the Editor: The article in the June issue of your magazine, "40 Years Ago From 30,000 Feet Up," got me to thinking again

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8819 Renton Ave. Seattle, Wash. about the area on the Mojave Desert known as the "Devil's Playground." I have often visited this region. It is, I believe, comparable on a smaller scale with Death Valley.

The time is here that California should set this area aside as a state park. It would be a sad thing if some private interest or the military decided to confiscate this area. Arizona lost the interesting Crater Range between Gila Bend and Ajo to the military. This area also would have made a wonderful park but, alas, it is now part of a vast bombing and gunnery range.

JOHN W. MAXON Upland, California

She Remembers Harper's Well...

To the Editor: We have only one big complaint about Desert Magazine—"There just isn't enough of it!"

One day after receiving our June copy, and already we have read it from cover to cover.

The article by Walter Ford on "Harper's Well" was especially interesting to me. I passed the well several times in my travels—always in a Model T Ford. How well I remember the washes and gullies and ruts in the old road.

IRENE V. HORN Roseville, California

The Value of a Monolith . . .

To the Editor: My apologies to very gracious and kind Dr. Edmund Jaeger-but:

Did any of the other readers share my shocked realization of mankind's blindness after reading Dr. Jaeger's article in the May issue, "Trails to More Outdoor Enjoyment"?

He writes: "I cannot think that the men I had with me that evening will ever forget the story I told them. Surely the great rock ('Hercule's Finger', a prominent landmark near Lucerne Valley on the Mojave Desert), that before was only a spectacular piece of stone, now took on a peculiar new and significant meaning."

And what was the story Dr. Jaeger refers to? One of violence — great suffering of horses and mules driven so hard they could not stop for water or rest, and perhaps some 1500 of them perished on the hot desert; a gunfight between the horse thieves and the rancheros that took place in the shadow of "Hercule's Finger." A retelling of ignominious history: avariciousness, greed, theft, resentment, anger, killing, cruelty to animals, the burying alive of a little boy and girl to "serve" a dead Indian chief.

Did the monolith take on "a peculiar new and significant meaning"? If so, what? Did what took place near its base change its quality, value or beauty? Is there any reason to associate it with violence and the dead past? Does the knowledge that blood was spilt here add to the charm of this giant of nature? If this stone could speak, would it not be more likely to say: "Please

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Page 4: D, Clifford Bond; Map by Norton Allen. 5: Leta Herndon. 11: Map by Norton Allen. 14: New Mexico State Tourist Bureau. 15: (center) Fred Ragsdale; (bottom) New Mexico State Tourist Bureau. 16 (bottom) New Mexico State Tourist Bureau. 17: Bill King. 19: Richard L. Cassell. 24: Map by Greenfield Lawrel. 28: (top) Charles Redler. 32 and 35: Maps by Norton Allen. 40: Frank L. Gaynor. 41: New Mexico State Tourist Bureau.

don't associate me with the violence of men-my message is peace and quiet."

Why can't we face reality? That amazing stone is adequate in itself and surely doesn't need a story of bloodshed to give it "a peculiar new and significant meaning."

Nature has great power to talk to us. Isn't it better to listen than to superimpose our silly minds on her by saying: "Now nature you have a new and significant meaning because I have learned thus and so."

BESSIE SIMON Ojai, Calif.

Invitation to Rockhounds . . .

To the Editor: The response I have received following publication of my short

article in the March Desert Magazine about the Fish Lake Valley, Nevada, Apache tear collecting field is most gratifying.

Some of the people who wrote have asked if they could buy Apache tears from us, but rockhounding is a hobby with my wife and me, and we are not in the rock selling business.

To those readers of *Desert Magazine* who plan to visit the Fish Lake field I extend an invitation to stop in Bigpine to visit us. Maybe we can exchange some rocks, yarns and ideas.

There are plenty of Apache tears at Fish Lake. The supply has not been dented.

F. B. TERRY Bigpine, Calif.



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		GP-35Z	Lepidolite	Africa	3 sq. in.	Slob 1/4"	1.10	
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38		GP-46Z	Catseye Quartz	Brazil	3-oz.	Rough	1.00	
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		GP-58 Z	Rhodochrosite Fink and Red	Argentina	3-or.	Rough	1.50	A
S		GP-59 Z	Rhodochrosite Pink and Red	Argentina	3 sq. in.	Slab 1/4"	1.50	Y
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É		GP-12 Z		India	3-oz.	Rough	1,20	
5		GP-13Z	Red — Green Agate	India	3 sq. in.	Slab 1/4"	1.50	
		GP-182	Bloodstone	India	3-oz.	Rough	1.50	
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GP-65 2	Rose Quartz	Brazil	3 sq. in.	Slab 1/4"	1,16
GP-66 Z	Asteriated Rose Quartz	Georgia	3-ar.	Rough	1.00
GP-67 Z	Asteriated Rose Quartz	Madogascar	3-or.	Rough	1.00
GP-68 Z	Ruby Corundum	Africa	1 sq. in.	Stob 1/4"	2.00
GP-69 Z	Ruby in Chrome Diopside	Africa	Approx. 1 cu. in.	Rough	.50
GP-70 Z	Ruby in Chrome Diopside	Africa	1 ½ cu. in.	Rough	1.00
GP-72 Z	Smaky Light Quartz	Brazil	3-or.	Rough	1.00
200	Medium Smaky Quartz	Brazil	3-01.	Rough	1.50
GP-74 Z	Dark Smoky Quartz	Brazil	3-or.	Rough	2.00
GP-757	Black Morion Smoky Quartz	Brazil	3-02.	Rough	1.20
GP-BOZ	Red Tigeraye	Africa	3-oz.	Rough	1.00
GP-BTZ	Red Tigereye	Africa	3 sq. in.	Slab %."	1.20
GP-88 Z	Green Tourmaline	Brazil	2-oz.	Sections of Crystals	2.00
GP-89Z	Pink Tourmaline	Brazil	2-oz.	Sections of Crystals	2.00
GP-90 Z	Mixed Tourmaline	Brazil	2-01.	Sections of Crystals	1,50
GP-91 Z	Green Tourmaline	Mozambique	2-oz.	Sections of Crystals	1,50
GP-92 Z	Watermelon Tourmaline	Mozambique	2-oz.	Sections of Crystals	1.20
GP-93 Z	Paleographic Red Agate	Africa	3 sq. in.	Slab ¾4"	1.20
GP-94 Z	Turquoise	Mexico	2-oz.	Rough	2.00
GP-99Z	Aventurine	India	3 sq. in.	Slab ¾4"	1.20
GP-100 2	Aventurine	India	3-oz.	Rough	1.00
GP-25 Z	Almondine Garnet	India	1-or.	Crystal	2.00
GP-26 Z	Spessartite Garnet	Brazil	1-oz.	Crystals	1.50
GP-27 Z	Cordierite Iolite	India	1-er.	Rough	1.50
GP-28 Z	Translucent Grey Jadeite	Burma	2 sq. in,	Slab 1/4"	2.00
GP-29 Z	Green and White Jadeite	Burma	2 sq. in.	Slab 1/4"	3.00
GP-30Z	Translucent Pink Jadeite	Burma	2 sq. in.	Stab 1/4"	2.00

All items sold on Money Back Guarantee

GRIEGER'S PASADENA, CALL

SIL WER CITY ==

The ghost of Silver City marks the place on Idaho's Owyhee Desert where one of the world's great mining booms took place . . .

REMEMBERED THE words of a Soil Conservation Service man who commented that even the sagebrush in Owyhee County shows the torture of growth under rigorous conditions. We were driving through the parched dusty country between Bruneau and Murphy, county seat of Owyhee County, Idaho—the latter town having fewer than 100 residents. Fickle desert winds capriciously lifted spumes of sand and let them cascade back to earth.

The Owyhee Desert claims the southwestern corner of Idaho. It is a land of superlatives. Near Bruneau are found some of the highest sand dunes in the world, the largest of which, 452 feet high, is higher than the dunes of the famed Sahara by 150 feet. Cutting a ragged slash across the face of the county is one of the deepest and most narrow canyons on earth-the Bruneau Canyon. In its 67-mile length only one place has been found where a horse can get to water, and in only four places have men been able to scale the rock walls. And 6000 feet up in the Owyhee Mountains, where freezing winter winds whip snow into drifts higher than a house, there lies for me the greatest superlative of all—the Queen of the Owyhee -the ghost town of Silver City.

At Murphy we turned west on a dusty county road, winding and undulating with the terrain toward the Silver City Mountains in the distance. As we ascended, the grand sweep of

Robert F. Harrington, who wrote the Silver City story with the assistance of Nancy Felts, is the superintendent of schools at Elk River, Idaho. The 34-year-old educator does summer work as a naturalist at Grand Teton National Park.



SPANISH - AMERICAN WAR VOLUNTEERS
POSE FOR THEIR PICTURE BEFORE DE-PARTING FROM SILVER CITY IN 1898

the desert below us, spotted with rocky ridges and barren valleys, began to crowd the horizon. Dust lay deep in the road, and vegetation was sparse. Paradoxically, the only sound came from our motor as we approached the town where once the thunder of stamp mills sounded above the creaking of harness leather, the squeal of poorlygreased wheels and axles, and the rumble of ore wagons on Silver City streets. Our road had once been enlivened by teamsters' oaths; the washes and canyons had hidden Indians intent on murderous deeds.

Miles rolled beneath our wheels. We entered a side-canyon where a stream suddenly made its appearance. The water seemed out-of-place, but the dry dustiness of the air disappeared and the scent of growing things took its place.

The 23-mile road into Silver City from Murphy is a good road as mountain roads go. It is narrow—in many places a one-car road—but certainly passable.

Past New York Summit, where stage drivers wrapped the reins around the brake and spurred their teams into the spirited run which gave newcomers an unforgettable first view of Old Silver, we entered a new world. The greenness of Alpine fir reached out to welcome us.

Silver City is a place of crumbling buildings set amidst hills scarred with the usual mining wounds. Weathered buildings, some boarded-up, others with sagging doors, offered mute evidence of historic days and deeds.

Altogether there are about 30 structures still standing in the town—the Masonic Hall, second oldest Masonic Hall west of the Mississippi; the Idaho Hotel; the print shop where the Owyhee Avalanche was published; the Wells Fargo office is half-caved-in; a church which time has stripped of denomination; the post office; powder buildings; residences. Some of the latter are shuttered. They are reputed to be completely furnished. It was expensive to freight heavy pieces to and from Silver City.

We walked through Silver's dusty streets and fancied we could hear the tramping of miners' boots and feel the throbbing of the earth as blasting took place in the mines. Behind these shuttered walls the social life of a vanished age had taken place: whist parties, stately dinners attended by Governor Steunenberg and young attorneys such as Bill Borah, who later was to achieve national renown as a senator from Idaho.

Once there was a half-dozen busy general merchandise stores, two hotels, three barbershops and many other business enterprises, including eight saloons where the boys celebrated success and forgot their failures. The

DE MUNICIPALITY

ravages of time and fire have taken their toll, and the surviving buildings seem to lean nostalgically toward the vacant gaps left by their departed companions.

Leading from the ghost town like threads of a spider web are the many roads and trails to the once-active mines and prospect holes. Some of these roads are in fair shape, but most exploring has to be done afoot or in a jeep. We found some interesting mineral specimens in the old mine dumps — nothing of much material value—just "souvenir stuff."

It all started in May, 1863, when 29 adventurous men left Placerville, Idaho, to search for the famed "Blue Bucket Diggings." According to a legend of early Oregon emigrants, a gold field of such richness lay at the foot of the Owyhee Mountains that the pioneers used gold for sinkers while fishing in the streams issuing from the hills. It was this fabulous wealth that the 29 prospectors sought as they ventured into the unexplored deserts of the Owyhee, populated at that time only by bands of hostile Indians.

After crossing the Snake River at the mouth of the Boise River, the party traveled in a southwesterly direction until it came to a large stream whereat it camped for one day. The stream was named Reynolds Creek after one of the men in the party. The following excerpt from the diary of O. H. Purdy, a member of the group and later a well-known citizen of Silver City, describes the discovery which followed:

"... Dr. Rudd, a verdant emigrant, not waiting to unpack his mule, took his shovel, and scooping up some of the loose gravel on the bank of the creek, panned it out and obtained about a hundred 'colors.' The excitement and amazement which followed this 'discovery' can better be imagined than described."

The men continued to prospect up the creek for a dozen days. At a place called Happy Camp, the laws of the

A PORTION OF SILVER CITY IN THE WINTER OF 1897. MASONIC TEMPLE, AT LEFT IS STILL STANDING, AND IN GOOD CONDITION.

district were made, and claims were located. The party thereupon returned to Boise Basin with news of the find. There followed a stampede into the Owyhee country.

In July of '63, the first quartz ledge was discovered in Whiskey Gulch by R. H. Wade and Company. Several days later the Oro Fino quartz ledge was located by A. J. Sands and Svale Neilson. A month later the same two men hit the Morning Star ledge.

Most spectacular of all the strikes of the Silver City heyday was the discovery of the Poorman Mine in 1865. The mine took its name from the fact that the discoverers were too poor to work it. In a fight for possession of the property, one set of "owners" barricaded the mine entrance and mounted two pieces of ordnance. They named the fortified mine "Fort Baker." Ore taken from the Poorman readily sold for \$4 an ounce, a figure said to be well below real value! The ore was an amalgam of gold and silver chloride, resembling lead, but tinted crim-

son, thus acquiring the name "Ruby Silver."

Throughout the district were found solid slabs of white, shining silver. Such occurrence is atypical, for silver is normally found in association with lead, copper and zinc. But nothing about the Silver City boom area was commonplace. This strike was one of the world's great bonanzas.

At the Poorman's 100-foot level a solid mass of ruby silver crystals, weighing 500 pounds, was unearthed. Specimens of this ore mass were exhibited at the 1866 Paris Exposition where they won a gold medal. First class rock from the Poorman yielded \$4000 to \$5000 a ton, with 2000 tons of second and third class rock bringing the sum of \$546,691.59. Tailings went over \$70 to the ton. Ore from the Poorman was so rich that large amounts were shipped across the ocean to Wales for treatment.

The electric-quick boom saw more than 250 mining locations recorded





ELEGANT HOME IN THE CENTER IS THE MINE SUPERINTENDENT'S RESIDENCE AT BOONEVILLE, A SILVER CITY "SUBURB." 1895 PHOTOGRAPH.

between 1863 and 1865. A number of these mines, up to 1881, were worked to depths between 150 and 1500 feet.

A dozen years of prosperity followed the initial Silver City discovery, in spite of the fact that only about half of the silver could be extracted by milling methods known there. Much of the ore was hauled by mule, horse or wagon train to the smelter at Salt Lake City, where the silver was removed and made into bricks for shipment to the Denver Mint. The cost of freighting a single ton of ore from Silver City to Salt Lake City was around \$50, but such high overhead pales into insignificance in view of the fact that one mine, The War Eagle, had a credited production record of \$30,000,000, this value being taken out in the first 10 years of the camp's history.

In spite of the prosperity of the camp at Silver City, bad days came sooner than expected. The Bank Panic of 1873, leading to the eventual suspension of the Bank of California in '75, brought the camp to its knees. The failure of this bank caused financial paralysis, and many large Silver City operators withdrew.

During these years of activity, sporadic Indian outbreaks occurred throughout the Owyhee. As in all other things related to this county, it seems that here again a giant of no mean dimensions was involved. Throughout the South Idaho area, especially in the narrow canyons a few miles south of the Snake River, the name of Nampuh was a scourge to travelers. This huge Indian, whose name means Bigfoot, was 6'81/2" tall, and weighed 300 pounds. His feet measured 171/2 inches in length and were six inches wide. He was reputed so fast afoot that he could cover 50 to 80 miles in one day. His depredations included the killing of many settlers, and attacks on stage and emigrant trains. So serious a problem did he become, that a \$1000 reward was offered at Fort Boise for his scalp and his feet. Nampuh was finally killed by John W. Wheeler in 1868.

Ten years later the Bannock Indians, led by Buffalo Horn, went on the warpath and crossed the Snake River at Glenn's Ferry, heading west in the general direction of Silver City. Along their route a number of white men were killed. News of the uprising was received in Silver City by telegraph, and on June 4 a meeting of the citizens was held at Champion Hall for the purpose of organizing volunteers to protect the settlement. The citizen militia decided that the best defense was a strong offense, and on June 7 it left Silver City to meet the raiders. At noon of the following day the volunteers were attacked by Indians at South Mountain Creek. In this engagement two of the white men were killed, one of them being Oliver Hazard Purdy, from whose diary the details of discovery were quoted. Buffalo Horn also was killed in the fight. The whites retreated to O'Keefe's ranch and remained there until the next day when it was learned that the Indians had moved on into Oregon.

The Bannocks tried to induce the Umatillas to join them, but failing in this undertaking, straggled back to

their reservation in small bands. Along the return route they massacred whites at every opportunity. It is believed that more than 100 persons were killed by these Indians in this uprising.

In the late '80s a revival took place in the Silver City area. A mining capitalist, Captain Joseph DeLamar, became the owner of a number of properties in September, 1888. These mines were vigorously developed by DeLamar until 1891 when he disposed of all his holdings to an English company for \$2,000,000 plus a stock interest which brought a considerable yearly income.

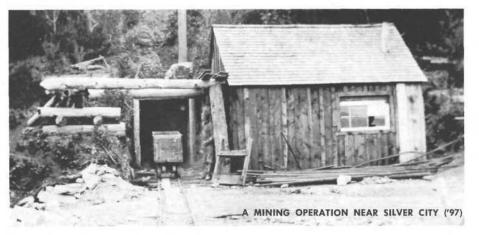
The happy days did not last long, for the handwriting was on the wall. In the next score of years mining activity gradually shrank, and by 1920 "Old Silver" was well on its way to becoming the ghost town that it is today.

In its brief history Silver City produced an amount of precious ore second only to that which came from the famed Comstock Lode of Nevada. It still ranks second in Idaho in the total production of mineral wealth (the internationally famous Coeur d'Alene area is first in the state).

Silver City did have some "firsts," however — the first telegraphic news wire in Idaho, the first daily newspaper in Idaho, and the first (and only) legal hanging in Owyhee County.

As we started out of town we stopped to look back at the dying camp. The shuttered, sightless windows of the buildings stared in the direction of the Florida and War Eagle mountains, as though pointing to vast riches yet locked in these hills.

Most of the 5000 people who once trod Silver City's streets have vanished into the dim hallway of the past. Tonight and every night the lonely wind will rove unchecked through vacant alleys and along deserted streets, and the Owyhee's Queen will sleep her restless slumber.



THE DESERT OF OWYHEE

By EARL J. LARRISON

Associate Professor of Zoology at the University of Idaho, and author of

"OWYHEE: THE LIFE OF A NORTHERN DESERT"

 Transitions between desert and irrigated land are often abrupt, but you will never see so striking a change from luxuriant lushness to arid harshness as is found in a drive south from Nampa, Idaho. You start in a land of plenty where on-ions, alfalfa and corn prosper as only such crops can when raised on fertile wellwatered soil. Havstacks, large and closely spaced, fine homes, wellmaintained barns, and tidy lanes all reflect the wealth a n d productive-ness of the area.

But, before you have traveled the 18 miles to the Snake River, the irrigated section ends with an almost startling abruptness. Browns and grays replace green lushness, and only small clumps of grass and other vegetation have a foothold in the desert which now

stretches before you. The vistas within the irrigation limits are shortened by lines of trees raised for protection, but there are no such windbreaks beyond the Snake. Instead, great light-colored patches mark the miles of ancient lake beds which lie between dark masses of rock of the higher levels. Cliffs and odd-shaped mounds project here and there with an irregularity which makes a spectator feel he is looking at a scene of confusion and disorderliness. The hard-surfaced road is the one mark of modernity in a desert which embraces, except for a few strips bordering the mountain streams and highlands and a little irrigated land, all of Owyhee, the southwest county of Idaho. Mountain ranges stand in the distance, their lower elevations dry, brown and smooth, their upper

Boise Nampa Mountain Home Silver City Grasmere 0 Riddle 9 ш NEVADA Owyhee

flanks roughened by growing shrubs and trees, and their higher peaks striped with banks of summer snow.

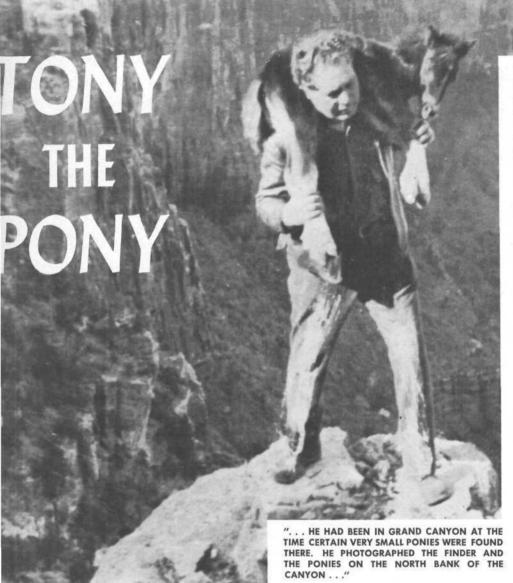
There are few sites which indicate the possibility of shade and moisture on the Desert Owyhee. Oregon bounds it on the west, the Snake River on the north, Nevada on the South, and its eastern boundary lies a hun-dred miles from its western. It is a large county even as Western counties go, containing only 300 square - miles less than the combined area of Connecticut, Delaware and Rhode Island.

One wonders how so much land can look so barren. Stunted junipers grow in scattered clumps in some sections, but there is little of softness to relieve the scenery. Flowering plants spring up early in the season, hastening to produce seed

which may lie for years before the time is favorable for germination. Nothing breaks the view; nothing appears to limit it. The whole scene reaches magnificently into space as the road leaves the lake-bed area and climbs toward the steppe plateau which lies between the Snake River and the Nevada line. But this land's impressiveness gives no feeling of softness and kindliness. It is the desert—mysterious and harsh.

The human population is as limited as vegetation is sparse. The last census listed 6307 in Owyhee County's 7648 square-miles. Of this number about three in 10 reside in small towns. Murphy, the county seat, has a population of only several dozen persons,

continued on page 30



WHEN WE LEFT Blue Canyon, traveling to Kayenta, we decided to visit the cliff dwellings of Betatakin. Horses for us and a guide with pack animal were procured at the Wetherill Post. The trip up a canyon of red rocks was glorious. The guide chose our camp for the night and took care of the horses while we prepared the supper. I wondered what hurt he had suffered in the past, for he seemed so reserved. We opened a can of peaches for dessert and passed some to him. His acceptance answered my pondering.

"Thank you, folks. I sure do like peaches. That last party I took to Rainbow Bridge liked them too, most as much as he liked himself. He ate them all without so much as giving me a sniff."

"Why was that?"

"Must have been a habit learned in a city. Out in this country when a man thinks of number one every minute, things usually happen to let him know there are other inhabitants around. For instance, there was that rubber mattress of his. It had to be pumped full of air every night. He couldn't sleep on the ground. I had to pump it at night and pack it on the mule in the morning. It was sort of natural toward the end of the trip to stow the rubber contraption so it would get a puncture."

The young guide joined us at the fire, all shyness gone as he repeated: "I sure do like peaches." We opened another can. When twilight came as a soft blanket to enfold us, the guide told stories of remote cliff dwellings in Utah, in some green, watered valley which must have been Eden, so alluring did he make it. He told of old pottery, remains of baskets, the usual mummy or two, but he said what he liked best in that watered valley were the wild ponies. He proceeded to tell us a yarn which is of no archeological value. It was too

weird a tale to take seriously, but it fitted the eerie atmosphere of the cliff dwelling country which for thousands of years had known the struggle of man's mind and body to come close to the powers of nature in his great need to survive and to know that "Which is, and which was, and which is to come." The guide continued:

"You know I'm a born horse-wrangler. I had my ropes and I started out at sunrise one morning to look for wild ponies. I was riding Tony, the toughest little pony for getting over rough places. Now Tony, with no lead from me, frisks straight up a mountain with the sun in our faces. He was quivering to beat the band. Once in a while he whinnied, excitedlike. I gave him the reins and he landed on top of a ledge where grew a bunch of aspens. The leaves were not shaking, but there seemed to be something alive in the trees. Maybe it was only the light shining through them, but that Tony, he saw something else. He went tearing along between the scattered aspens, with the sun still in our faces. Believe it or not Tony and I found ourselves viewing ten small white ponies pawing the ground in a circle near a dark pool of water. I made Tony stand still. He was trembling. It was enough to make a man feel queer, let alone a horse."

The guide looked wistful and disturbed as he continued:

"The queer thing is about me, a born horse-wrangler. I never thought of roping those white beauties. They were undersized animals, who acted different from any breed I knew. They pawed the ground on the east side of the pool, then on the south, then west, then north. I couldn't help thinking about the Fire Dance in the corral when the Navajos, all painted white, move around the fire in the same direction. While I was thinking about those spooky Fire Dancers, I heard an owl hoot. The ponies vanished. By that time the sun was no longer in my eyes. I got off Tony and walked to the pool. There wasn't a hoof mark in sight. Tony followed after me, nibbling at grass. He seemed as much at home in this green place as you and I do on Thanksgiving Day when we eat turkey with the old folks. It seemed like he was extra happy on that high mesa."

My son asked if there were any cliff dwellings in the neighborhood, and was told there was a cave facing south,

By Laura Adams Armer

"Tony the Pony" is the fifth in a series of articles by Mrs. Armer telling of her experiences in the land of the Navajos. This episode occurred in 1925.



TWENTY-FIVE-YEAR-OLD PHOTOGRAPH SHOWS A SMALL SHEPHERD BOY TENDING HIS FLOCK

not a very big one, with ruins of a small village in it, with plenty of broken pottery, coiled ware and some fine pieces of black on white. The story teller resumed his yarn.

"While I was poking around in the rubbish at the back of the cave I came across some fossil bones. They were horse bones, but so small I couldn't believe my eyes. When I found a skull it wasn't much bigger than a coyote's head. The jaws showed where there had been forty-two teeth just the same as Tony has. If you have any dealings with horses you look in the mouth. Here was I finding a fossil horse in an old cliff dwelling. That's strange too, because today Indians don't associate with bones. The Navajos call them chinde. That means ghost in their language. What I liked best up there on the mountain was the way I felt about Tony. I knew he was back where his ancestors came from. He knew it too. He had that feeling of belonging to a place."

The guide looked wistfully into the dying embers of the campfire. He sighed and said:

"Sometimes I wish I was a horse."

He moved off into the dark. We lay down in our bedrolls, quite content to be together in the great wilderness. In the morning we saw Betata-kin. That is a Navajo name meaning Hillside House. On our horses we approached a reddish sandstone cliff made all the redder by the complementary green of the woods at its base. A shadowed cave in the cliff yawned wide, roofed by the overhanging ledge. The trail to Hillside House left the woods to wind around the foot of a tallus slope dotted with pinyons. Just as we climbed to the floor level, our guide, who overnight had become the official statistician and exponent of material facts, pointed to a spring coming out of the rock. Above it a pictograph showed a human figure with upraised arms on each side of

which was a curved line. Next to this personage some kind of horned animal had been painted. The guide said:

"It can't be a mountain sheep because the horns are not spiraled. Maybe it's an antelope. Now let us view the old houses. The cave is 450 feet long and 250 deep."

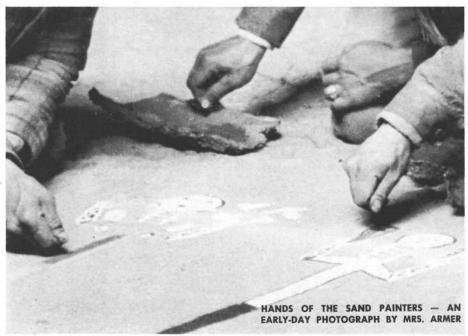
Hillside House was my idea of a homesite. Here were what could have been advertised in cliff dwelling days as modern improvements: running water, solar heating, shade and shelter made by a beautifully colored sandstone roof. My desire for a house in the wilderness increased as I pictured the possibility of working quietly, painting murals in my private apartment, weaving perhaps, and studying trees and flowers of the magic land.

I was brought back from the flight of fancy by the guide's remark that we must return to Kayenta. We said

good-by to Hillside House and rode back down the canyon. The spell of the country stayed with me. When the guide told the legend of a spring in the neighborhood which occasionally gushed forth, showering the rocks with carved turquoise, I felt that my mind could absorb no more. I knew that the desert had claimed me for all time. There was no turning back on the turquoise trail. I played with the thought that man's unconscious mind goes back to the time when he was brother to the animals, understanding them, loving them at the same time that he ate certain of them for food. I knew that I had touched early animistic belief. I knew that our guide to Betatakin could not help but feel its influence. To him, Tony the pony had as much right to a soul as himself. In a desert land, living is so difficult, providing of food so constant an occupation, that man needs recreation. He finds it in fancy, in the making of ephemeral sand paintings on the floor of the medicine lodge, and the dancing of Katchinas in the pueblo plazas.

It was years later when my husband and I had moved to the redwood country of northern California that a photographer came to our little town. He had been in Grand Canyon at the time certain very small ponies were found there. He photographed the finder and the ponies on the north bank of the canyon. Generously, he gave me the negatives and prints he had made. To be sure, the ponies were not white, but they were so small the finder could hold one in his arms. In that great Southwest, I agreed that there was no use asking questions. -Next installment: "When the Thun-

—Next installment: "When the Thunder and the Snake Are Asleep"





SCATTERED THROUGHOUT THE SOUTHWEST ARE ANCIENT INDIAN PUEBLOS, CHURCHES AND MODERN HOMES MADE FROM THE EARTH ITSELF—FROM THE DESERTLAND'S MOST COMPATIBLE BUILDING MATERIAL: ADOBE

By HENRY P. CHAPMAN





HOW ADOBE BRICKS ARE MADE. AT LEFT, MIXING THE ADOBE; RIGHT: SUN-DRYING THE BRICKS.



LONG BEFORE THE GILDED breastplates and plumed helmets of Spanish Captain-Generals flashed in the Southwestern sun, multi-storied Indian apartment houses rose out of the desert to scrape the turquoise skies.

In 1539, when the exploring monk Marcos de Niza returned to Mexico City after his expedition to

"the northern wilderness" (New Mexico), he told thrilling tales of discovering the legendary Seven Golden Cities of Cibola. Each of the cities was reputed to be larger than Seville; each outglowed the cities of the Aztecs in richness and magnificence. It was later learned that what the good Fray Marcos had actually seen were Hawikuh, Kyanawa, Kwakina, Kiakima, Matsaki and Halona—the six sungilded metropolises of the Zuni Indians.

The disappointment in finding cities of mud instead of gold failed to discourage the march of the *conquistadores* into the Southwest. Coronado came first, in 1540, resplendent in chased gold armor and leading over a thousand soldiers, servants and slaves. Chamuscado followed in 1581, Espejo in 1583, Sosa in 1590, Bonilla and Humana in 1593, and Don Juan de Onate in 1598.

"Pueblo" was the Spanish word that the first fortunehunters applied to the cluster of mud dwellings that made up an Indian settlement. The parada of conquistadores who followed in Captain-General Coronado's footsteps discovered a prodigious distribution of these mud pueblos, populated by hunters and farmers, in "the wild new Mexico" they had come to tame. They rode upon one thriving Indian "city" after another: San Felipe, Santo Domingo, Zia, Jemez, Tesuque, San Ildefonso, San Juan, Acoma These mud metropolises are still in existence; they are still populated.

In northern New Mexico stood the architectural wonder of the strange arid land. Mountains of mud were shaped by Taos Indian hands into "skyscrapers"—four and five-storied apartment houses. If Coronado's Captain Hernando de Alvarado, who rode into the Taos Pueblo's plaza in 1540, were to return today he would find it the least changed of all the pueblos. The 1210 Taosenos living here today are forbidden the use of natural gas, electricity, a domestic water system, sanitation facilities and telephones by their Pueblo Council. Water for drinking and cooking is hauled in ollas and tin cans from the silver stream that runs through the village. In many other Rio Grande pueblos bread is baked in modern electric or gas ranges. At Taos the baking is done as it has always been done—in hornos, igloo-shaped mud ovens lumped in groups outside the mud mansions. This freezing of "progress" stems from a desire on the Indians' part to cultivate the important tourist trade.

Indians who built the first mud mansions of the Southwest used the "puddled mud" (or "poured mud" or "pice") method of construction. Walls were raised by pouring a layer of puddled mud into forms made out of animal hides. After the sun dried one layer of mud, another was poured atop it, and so on until the desired height was reached.

Beneath the New Mexican sun, in Santa Fe, there still bakes an ancient and excellent specimen of puddled mud architecture known as "The Oldest House in the United States." Its exact vintage is plastered in mystery, but it is believed to be pre-Spanish. During recent restoration work it was detected—accidently or purposely—that this building's venerable and anonymous architect employed amazingly sound engineering principles, among them the "taper-

ing wall." Walls were made three-feet thick at the base, lessening to a two-foot thickness at the top.

Mixed into the mud mortar of this old house is a legend that Montezuma's Aztec chieftains often parleyed here. During the Pueblo Rebellion of 1680 Indians tried to destroy all the mud mansions in the Santa Fe area, but left this building standing. Its puddled mud construction mutely testified to the fact that the house was built by Indians, not in the fashion of the hated Spanish conquerors, and thus it was saved from destruction.

Casa Grande, 50 miles southeast of Phoenix, is the only existing example of another method of earth construction employed by prehistoric Southwestern Indians. Sixhundred years ago a shifting band of Pueblo Indians peacefully settled among the Hohokam (a modern Pima Indian designation meaning "The Ancient Ones" as applied to the Indians who tenanted the Gila Valley about the time of Pompeii's destruction by an eruption of Mt. Vesuvius).

To protect their crops and villages, the Puebloans raised a 30-foot combination watchtower and apartment house from which they could spot approaching marauders 10 miles away in all directions. Their building material was *caliche* mud, made from nitrate of soda clay found on the subsurface of the desert floor. Without forms, moulds or bricks, these Indians piled the putty-like mixture in a two-foot high horizontal strip, allowed it to dry, then added the next layer. The completed structure was four-stories high, partitioned into 11 rooms. To this day the hand swirls made by the builders while plastering the walls may be seen etched inside the Casa Grande. The watchtower is now a national monument.

Mansions of mud are indigenous to the arid areas of the New and Old Worlds alike. Mud architecture extends from our Southwest through Mexico and Central America into Peru. It is prevalent in Spain, North Africa and in the desert countries east of the Mediterranean Sea. It was the conquering Moors who introduced into Spain during the Middle Ages a new method of preparing mud for construction purposes which was later to become wont in our Southwest.

In 1598, when one of the Hispanic knights, Don Juan de Onate, established San Gabriel, *Nuevo Mejico's* first Spanish colony, he imbued the Southwestern Indians with their first knowledge of the Cross, of King Philip II and of the Moors' adobe—"sun-dried brick."

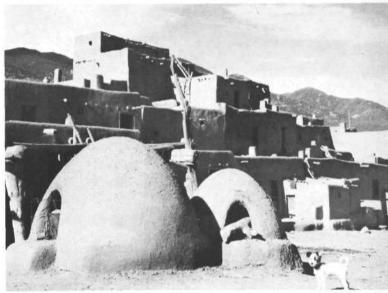
Upon the site chosen for the first capitol of the new territory there sprawled poured-mud ruins of part of the Yunque-Yunque Pueblo on the Rio Grande River. Onate renamed the populated Indian village on the east bank San Juan de Los Caballeros. The ruins on the opposite side were rebuilt as homes and stables for the colonists, and called San Gabriel. Indian labor was conscripted for the reconstruction, during which time these people learned the Spanish-Moor method of building with bricks. They were shown how to mix straw into the clay mud for added cohesion. This mixture was poured into moulds and laid out in the sun to bake into adobes. Some of the San Gabriel walls were put up in the old poured-mud manner, but for strength and durability rough stones and rubble were added as reinforcement. In less than two weeks the first church in New Mexico was erected.

In 1610, after the failure of San Gabriel, Don Pedro de Peralta, third governor of New Mexico, chose a site for the new capital city. He named it La Villa Real de la Santa Fe de San Francisco de Assisi, and he decreed that a *Palacio Real*, "fit for a king," be built. It was—out of a mixture of straw and mud.

Through the turbulent centuries that aged New Mexico



PREHISTORIC CASA GRANDE . . .



. TAOS PUEBLO . . .



. . . "MODERN" SANTA FE

into history, the salas of this royal mud mansion served as headquarters for an assortment of authorities: Spanish hidalgos, Indian rebel chiefs, Mexican politicos, Confederate generals and American governors. In one of these mudplastered rooms Territorial Governor Lew Wallace penned the final chapters of his famous novel, Ben Hur. The royal mud mansion endures to this day as "The Palace of the Governors," and its three-foot-thick walls guard the Southwestern historical treasures of the Museum of New Mexico. On June 17 a 11/4 cent postage stamp was issued by the

Post Office Department to commemorate Santa Fe's 350th anniversary. Featured on the stamp, first of its denomination, is the ancient mud palace.

Not far from the old capitol and directly across the narrow calle from The Oldest House stands another sunbaked Spanish mud mansion—the San Miguel Chapel. Its adobes still wear scars inflicted during the uprising of 1680. After failing to breach the mud walls with lances and fire, the Indians stabbed fire-tipped poles into the protruding wooden vigas supporting the heavy foot-thick dirt roof. An hour later the roof caved in. The smoke-stained walls of adobe, which had echoed the Te Deum of monk choruses from the first days of Santa Fe, stood as silent as shrines for 12 years. Then came General Don Diego de Vargas' peaceful reconquest of the Adobe City and repairs were begun on the church. Tradition insists that General de Vargas is buried beneath the sanctuary, but there is no substantiating evidence.

The capital city of New Mexico was plastered with the names "Adobe Town" and "Mud City" by American trappers and traders who pioneered commerce with the then Mexican villa in the early 1800s. "Folks hereabouts live inside piles of mud," accounted a mountain man from



THE RUINS OF FORT UNION . . .



. . . CRISTO REY CHURCH IS OF RECENT CONSTRUCTION

Kentucky. In Commerce of the Prairies Josiah Gregg confesses mistaking Adobe Town's mud architecture for brick-kilns scattered over the countryside, until a friend informed him that: "It is true those are heaps of unburnt bricks, nevertheless they are houses—this is the city of Santa Fe."

An imposing tribute to building with mud is the historic "Queen of the Desert" which reigns over the cactus kingdom of southern Arizona. Guided by Franciscan padres, the Pima, Papago and Sobaipuri Indian builders of the San Jose de Tumacacori Mission, went a step further in preparing some of their mud bricks. They baked them under extreme heat inside kilns. The result was a red brick, much harder than the sun-dried ones. These burnt (or fired) adobe bricks were used for greater strength and endurance in such sections as the exposed tops of walls and the bell tower. Enough bricks, both fired and sunbaked, went into the building of this mission to form a stack three feet high, three feet wide and a mile long. Secularization of the mission by Mexico kept the queenly mud mansion of the desert from being completed.

Today new mud mansions rise in the vicinity of the Southwest's ancient mud mansions. Only 20 years ago—four centuries after Coronado's *entrada* into New Mexico—the Cristo Rey Church was built on Canyon Road in Santa Fe. Into this job went 15,000,000 pounds of mud.

Not too long ago the least expensive item on a South-western home-builder's list were *adobes* at \$15 per thousand. Today the going price is five times fifteen. Paying \$75 for every thousand mud bricks needed for an *adobe casa* is enough to make many budget-minded builders for-sake *adobes* for the less romantic commercial cinder blocks. Some people beat the high price by making the *adobes* themselves.

Southwestern paisanos who can determine the quality of soils by gritting them between their fingers, snort at the popular belief that the more clay in the soil the better the adobes. Through their graying mustaches they will tell you that too much clay will result in adobes that shrink and crack. Too much sand will make adobes crumble. In many areas of the Southwest, Mother Nature has already mixed the soil in proper proportions of quartz sand and clay for superior adobe material. Where such a ready-mix is not available, sand and clay are brought together and blended into a satisfactory mixture.

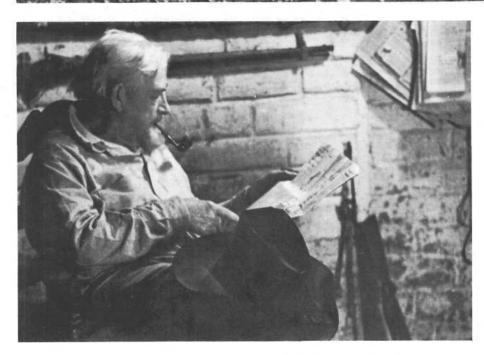
Mud for the *adobes* is prepared in a hole about three feet wide and twice as deep. After an all-night soaking which allows the water to thoroughly saturate the mixture, straw is kneaded into the mud. Old-timers can recall when corn husks and horse manure were used instead of straw.

Forming the *adobes* comes next. The mud mixture is poured into a wooden form which shapes four bricks, each 14 inches long, 10 inches wide, 3½ inches deep. After the form is lifted, the bricks are left undisturbed to dry in the sun for several days. When sufficiently dried for handling, the *adobes* are loosely ricked on edge, three or four high, and left to the sun and wind for further drying and curing. Like *vino*, *adobes* improve with age. When ready for building, the same mud mixture used for forming the *adobes* is prepared for the mortar.

Old Fort Union, the largest U.S. Army fortification of the Southwestern frontier during the third quarter of the 1800s, was built with *adobes* prepared in the manner described above. But, it was at Fort Union that *adobe* walls were first topped with burned-brick copings in New Mexico Territory, a practice which led to the "Territorial" type

ot architecture which today vies with the "Pueblo" style for popularity in Santa Fe. The ruins of Fort Union recently became New Mexico's ninth national monument.

The Southwest is strewn with mud mansions handbuilt by four cultures. Indian, Spanish, Mexican and American *adobe* architecture mingles as harmoniously as its peoples. From New Mexico to California pueblos and royal palaces, mission churches and kivas, forts and museums, stagecoach stations and office buildings, cantinas and modern homes stand side by side.



The Old Mirage-Salesman HARRY OLIVER

has these comments on the subject of

¶ If built right a one-story adobe house is fireproof. It's earthquake-proof, dustproof, soundproof, heat-and cold-proof, rat- and termite-proof, bulletproof—and almost proof against bad design. This is due to the thickness of the walls, and danged if these walls don't take on more character as they age.

¶ The government has put out some silly pamphlets on adobe construction, not worth sending for. Many other people have wrong ideas about adobe. A big oil company is making "super" adobe bricks that will "last longer."

¶ Last longer than what? Good oldtime well-made common adobe brick (if well-roofed) is good for about 300 or 400 years. Why spend money with the big oil company to get a brick that will last 500 years?

¶ It is said that if Mexicans sing as

Before launching his unique "Desert Rat Scrapbook" ("the only newspaper you can open in the wind"), Harry Oliver was for many years one of Hollywood's leading art directors. He created the sets for such memorable motion pictures as the first "Ben Hur," "Good Earth," "Viva Villa," and "Seventh Heaven."

"Studying building materials and methods was my job," he writes, "and of all the styles I ran across, adobe fascinated me most. I built four homes—including Old Fort Oliver—out of adobe." Oliver's "fort" is located in Thousand Palms, Calif.



they make adobes for a new home, the home will always be a happy one.

¶ Nine out of 10 adobe houses are never completed. The reason is that constructing with this free building material is not only hard work, it is lots of hard work. To build an adobe house you must move tons and tons of material.

¶ So, when you plan your layout don't start by building a place for your car, or a chicken-coop to see how things will go. Start right off with the living room. Make it a large room with a big fireplace on one wall. On the two walls flanking the fireplace, build open arches. These will lead to the bed-rooms and kitchen when you get around to building them. In the meantime, you can board up the arches. With your living room finished you have a place to sit when it's hot and a place easily kept warm when it's cold. And if you get tired of building with adobe (and you will), you can add rooms made of wood on either side of your living room. But, the adobe living room makes your house a genuine adobe.

¶ If the soil is not right for adobe bricks, don't make the bricks somewhere else and then haul them back to the building site—haul in the raw materials, the clay and the gravel. Always make the bricks near where you want to use them.

¶ Clay, mud, adobe—call it what you will, but it must have gravel mixed into it to make good adobe brick. Use about a third mud and two-thirds gravel. This will make a strong brick. Putting straw in bricks can only help if there is to be a lot of handling. In one year the straw dry-rots, and you have nice tunnels through your walls for the bugs.

¶ If you want to use water-proofing on the outside walls, okay. But, inside walls should be of plain adobe, especially if the house is in the California earthquake belt. Plain adobes take the shock better. The harder, more brittle oil bricks can't take it. Witness the Brawley City Hall.

¶ Which brings to mind an earthquake yarn. During a severe tremor in a certain desert town, the city hall took a bad jolt and the members of the city council, then in session, left in a hurry. The clerk, a man of rules and regulations, wanted the minutes of the meeting to read legal. It took some thought, but finally he put down: "On motion of the city hall the council adjourned."

¶ I once built a house with "Daily Dozens"-12 adobe bricks made each day before breakfast. Many an oldtimer has told me that he is 70-yearsyoung or 75-years-young because he had always chopped the day's supply of firewood before breakfast.

The frame for adobe bricks should be made out of 1x4 lumber. Regulation brick size is 12x18x4 inches.

¶ In September, 1887, fire destroyed the greater part of Calico, California, in less than an hour. When rebuilding time came (and it came quickbefore the ashes were cool), the pioneers agreed that at least every fourth structure would have to be built of adobe-this to prevent a repeat of the disaster.

¶ I got John Hilton, the artist, inter-

ested in building with adobe back in the '30s when John was situated across the highway from Valerie Jean Date Shop near Salton Sea.

¶ "John," I told him, "you should build something out of adobe. I know you express yourself with paint and in writing and that guitar of yours, but vou don't know real self-expression until you build with adobe. Laying adobe bricks is good for the soul."

¶ Here's what John wrote later:

"I discovered that Harry was so very right about expressing oneself! Why the first time a huge adobe brick broke while I was hoisting it in place and each half landed on one of my feet, I expressed myself in a manner that brings a glow of pride to me even now.

"Then there was the time a big blob of fresh mud dropped and plugged my pipe and left ear while I was stooping to pick up another brick, and the days when I battled gnats with mud-covered hands until I looked like a bargain counter Al Jolson, and the time I climbed hurriedly down the ladder and shook hands vigorously with an old friend before she could protest. You should have heard her express

"Then there was the afternoon when I slipped on a gob of wet mud and landed on my cement floor with a 60pound brick in my lap. And the other time-but, why should I go on? There is positively nothing on earth like building with adobe to make one express himself."

The Mexican builds an adobe house because he wants a house. The American builds an adobe house because he wants an adobe house. These places have all the romance, color and simple good taste of the early California pastoral homes. They give us that solid and fine something to tie to. A child born in an adobe home will always have something to boast of.

An adobe house puts you at ease. To live in one automatically makes you an aristocrat.

How much do you Desert UIIZ know about the Great American Desert? Here's a quick way to find out. If you get 12 or less correct answers, you're a tenderfoot; 13 to 16 right answers rates a One-Who-Savvys-The-Desert rating; 17 or better and you can tell your friends you are a Desert Rat. Answers are on page 31.

The parasite plant, "Desert Mistle-toe," never grows on one of the toe," never grows on one of the following trees: Joshua Tree.... Palo Verde... Mesquite... Ironwood.

The Mohs' Scale is used in measuring the: Purity of gold ... Age of carbon Velocity of a river ... Relative hardness of minerals ...

According to legend, he who drinks from the Hassayampa River of Ari-zona will: Never tell the truth again... Never be thirsty again... Return to Arizona... Adopt the ways of an Indian....

4. Hoover Dam was erected primarily to: Generate electricity.... Provide irrigation waters for the Imperial Valley.... Control the flood waters of the Colorado.... Provide drink-Valley... Control the not of the Colorado... Proving water for Los Angeles.

Holacantha emoryi, so-called Cruci-fixion Plant, is most often found growing: Around brackish springs
.... On high desert peaks.... In the dunes..... On the floor of dry lakes

"Chaparral Cock" is one of the many common names given to the: Roadrunner.... Cactus Wren.... Elf Owl.... Gila Monster....

Billy the Kid's reputation was largely established in the: Bisbee Massacre... Tombstone Bank Robbery.... Lincoln County War... O.K. Corral Gunfight

Ancestral home of the Acoma

tribesmen of New Mexico is thought to be the: Blue Mesa Mesa.... Red Mesa.... Enchanted Mesa

Correct spelling of one of the most common plants on the Low Desert is: Ocatillo... Ocotillo... Ocatilla... Ocotilla...

Lorenzo Hubbell was a: Missionrader ... Mission-ary ... Governor of Utah ... Indian trader ... Miner ... Color of the Nolina blossom is: Red . White ... Blue ... Orange ...

The famous Goosenecks are on the: Gila River ... San Juan River ... Rio Grande Furnace Creek

Largest city visible from Nevada's Charleston Peak is: Carson City Reno Humboldt Las Vegas

Traveling west on U.S. 66, the first California city you would come to is: Needles ... Blythe ... Barstow .. El Centro.

Mexico achieved its independence from Spain in: 1801.... 1821.... 1861_

Western history honors John Charles Fremont as the: Law-Giver... Path-finder... Discoverer... Desert Scout

17. The common occupation of Gay Staveley, Harry Aleson and Art Greene is: Writer... River Guide... Archeologist... Artist...

18. In mining parlance, an excavation for the extraction of ore is known as a Sluige Stone Vein

as a: Sluice... Stope.... Funnel.

The field of science concerned with The field of science concerning deserts is known as: Penology ... Aridology..... Anthropology_ emology.

The big discovery that led to the Rhyolite, Nevada, boom, was the mine known as: Bullfrog ... Copper Queen ... United Verde ... Lost Dutchman....

POEM OF THE MONTH

the potter

EDNA S. SMITH San Jose, California

Up and down, the sandalled foot Turns the potter's wheel; While ageless hands with dextrous art, Press and shape and feel.

A bulge in here, a dent in there, As spinning wheel turns round; And from the shapeless mass, in time, Springs beauty from the ground.

Into the kiln to smooth and purge, Is placed the shapen bowl; And it comes out in fiery glow, A part of potter's soul.

HOW TO GET

B_Y HERBERT L. STAHNKE

Dr. Stahnke is head of the Division of Life Sciences and director of the Poisonous Animal Research Laboratory at Arizona State University. As the perfecter and principal advocate of the Ligature-Cryotherapy (immersing wound in ice water) method of treating snake bite, his name has been much in the news in recent years.

THE PROBABILITY of your being stung by a scorpion is greater than you think. Scorpions are found in all of the continental United States except the New England and Great Lakes states.

In order to get stung you will have to know where to find scorpions. Their dwelling places are many and common. This is indicated by the following list compiled from collection reports of thousands of individuals:

Scorpions are found under boards, boxes, rocks, sheet metal, sacks, bricks, rabbit pens, roots of trees, stumps, loose bark of trees, cement blocks.

Other outdoor hiding places are: sand boxes, outside walls of houses, ditch banks, sidewalks, lawns, chicken-houses, walls of wash-houses.

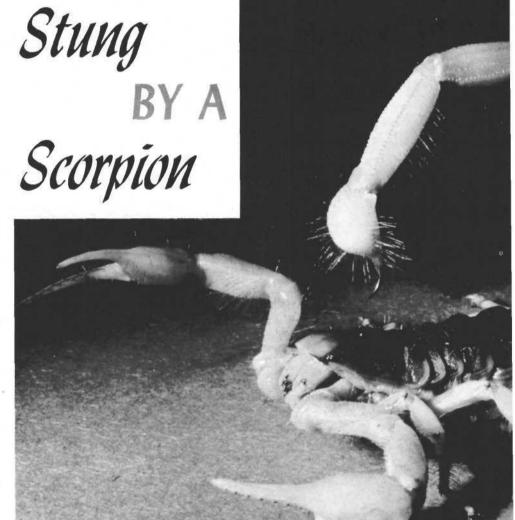
Indoor hiding places reported were: the floor of any room of the house, on davenport, in washing machine, in bread-box, under wash cloth in bathroom, on dining room wall, on kitchen wall, in egg crate, on bed, in bed under covers, inside old mattress, in cellar, in bath tub—practically any place you can name.

If, in addition to observing the common scorpion habitats, you give heed to a few scorpion behaviors, your success in setting up a "scorpion rendezvous" is greatly enhanced. For example, scorpions are nocturnal. They do all their wandering around, courting and whatever else is a good night-time activity, after dark. When hiding under an object during the day, many species cling upside down on the underside of the object.

Physicians' reports reveal the following list of activities that a few members of the "Scorpion Club" were engaged in when stung:

AGE PART OF BODY AND CIRCUM-STANCES WHEN STUNG

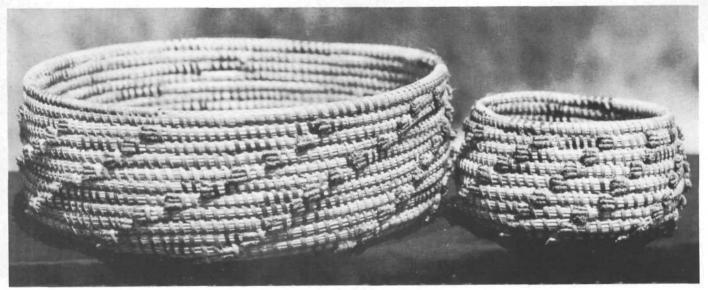
1 Thumb—reached for pan in kitchen cabinet, scorpion in pan.



- 1½ Hand—reached for doll, scorpion under doll's clothes.
- 1½ Foot scorpion fell off ceiling into bed.
- 1½ Leg sleeping on floor of jail with mother.
- 2 Thumb picked up sprinkler, scorpion in sprinkler.
- Thigh dressing, scorpion in clothes.
- 2 Foot—getting out of bed, stepped on scorpion.
- 3 Foot—playing in rock pile.
- 3 Hand reached up on top of dresser for toy.
- 3 Finger lying on rug watching TV.
- 4 Toe—stepped on scorpion in old house.
- 4 Hand playing around cement brick wall.
- 4 Hand picking bark off tree, scorpion in crevice.

- 4 Knee—playing on ground.
- 5 Finger—playing in sand.
- 6 Finger-crawled under bed.
- 6 Hand—on school grounds, scorpion hiding in dust rag.
- 7 Chest—stung while asleep.
- 8 Foot—scorpion on towel, mother brushed it off, landed on foot of patient.
- 9 Hip and thigh scorpion in trousers.
- 11 Hand—stung finger as scorpion was brushed from trousers.
- 12 Thumb—playing with calf skin.
- 12 Finger put hand on outside window sill.
- 12 Finger—reached into floor drain.
- 13 Thumb—picked up newspaper.
- 17 Toe—sitting on lawn chair.
- 17 Finger-working under car.
- 22 Wrist—cleaning house.

continued on page 29



TWO OF JUANITA NEJO'S BASKETS. SPIRAL EFFECT IS GAINED BY LEAVING THE BUTT-ENDS OF PINE NEEDLES EXPOSED.

Last of the Basket Weavers

Into the pine needle baskets of 77-year-old Juanita Nejo are woven the memories of childhood

By SAM HICKS

JUANITA NEJO was raised on the Aynaja Reservation of eastern San Diego County where the high rolling hills of the California Coast Range are spotted with stands of pine timber. These trees remain the unchanged color of green jade in spite of a summer heat treatment which tempers the surrounding vegetation to a burnished gold. In this high timber country—over 70 years ago—Juanita Nejo was taught the tribal art of weaving baskets from pine needles.

Indian baskets served many purposes. Some of these household utensils were so tightly woven they held water; all were so carefully handcrafted that the finest meal could not sift through them. The fresh appetizing scent of pine constantly surrounds these baskets, and their hard smooth interior surfaces are easily cleansed. They are attractive in appearance, extremely durable, and were formerly fashioned in a host of sizes and shapes to fit the Indians' various needs.

These pine needle baskets are called canasta jimaras by Juanita and the few remaining people of her tribe. Although these tribesmen of the Aynaja stem from the Mission Indians, they speak their own tongue — a definite Indian dialect softly intermingled with Spanish. The word canasta is, of course, Spanish for basket; jimara is

apparently an Indian noun that further identifies the basket.

Juanita and her husband, Angel, now live in the south-end of the Temecula Valley. Once each year they drive their ancient Pontiac past Lake Henshaw and Santa Ysabel to the Julian country to gather pine needles. On their way they skirt the base of pine-covered Palomar Mountain, but they pass the side-road that leads to the great observatory because Juanita insists that the pine needles there are



DIAMETER OF THIS BASKET HAVING BEEN DETERMINED, JUANITA BEGINS SHAPING SIDES

not the right kind for her baskets. My observations lead me to believe that needles from the young Colter and Ponderosa pines of Palomar are identical with the ones she and Angel gather another 30 miles beyond. But, Juanita has little interest in the shining aluminum dome which houses the famous 200-inch astronomical mirror, nor does she hold any special affection for the pine trees atop Palomar Mountain which she regards as comparative strangers. At Julian are the trees under which Juanita gathered pine needles when she was a little girl.

The cluster of needles used in Juanita's baskets are carefully picked from the boughs of young pine trees the three-needles-to-the-cluster variety; selected for matching length and thickness, then neatly arranged in cardboard boxes for the trip back home. After filling all the empty cartons occupying the back seat of their Pontiac, the Nejos return to their place in Temecula Valley where the harvest is spread out in the shade to cure. Care is required in this process. Sunlight dries them too quickly and causes them to become brittle. Too much shade triggers a black fungus growth that permanently discolors the needles and makes them useless. From each carton of needles, roughly the size of an apple box, Juanita estimates she can make two large baskets. To her a basket 12 to 14 inches in diameter is grande.

After the curing is completed, the butt-ends of the needle clusters are skillfully cleaned of excess bark and pitch. Then with a string Juanita ties the needle clusters into bundles to be stored until basket-making time.

A tubular green reed grass (called kuanaya by Juanita) that grows around the spring at the head of Pachanga Wash, is next gathered by the Nejos for the baskets. These peculiar hollow reeds grow long and pointed, some reaching five feet in length. The bottom 12 or 18 inches of each stem is a pretty reddish brown color which remains permanent while the upper two-thirds of the stem changes from green to yellow as the reed is cured. Shortly after these reeds are pulled from the moist earth where they grow, each stem is carefully split into thirds and slowly allowed to dry. The pitch is then scraped from the inside surface of the reeds. After scraping each strand, Juanita wraps them into identical circular coils, and stores them away.

These reed strands are amazingly strong, and after soaking them in water to make them pliable, the thongs are pointed on one end with a razor-sharp blade. They are used to bind the pine needles, layer on layer, to eventually form the basket. Juanita uses a similar binding material-the long tender shoots of squaw bush which she calls paschaa-to form the nucleus of her basket. Occasionally, as work on the basket progresses, Juanita intersperses sections of this paschaa bind so that it appears in pleasing white contrast to the reddish-brown and yellow of the Kuanaya reed.

A long tough broom grass gathered from the high ridges surrounding Rainbow Valley is added one stem at a time by Juanita as a filler during her basket weaving. As she works, the pine needles are placed with skill so that they completely surround the stems of coarse grass, thereby preventing the latter from showing on either the inner or outer walls of the finished basket.

At approximately every two-inch interval on the growing basket, Juanita adds three clusters of pine needles held evenly so that the butt-ends of the needles are exposed on the outside wall of the basket and there, with the use of her awl and the reed thong, she binds them securely in place. The point of one needle from each individual cluster of three is broken off about two inches back in order that more pine needles and occasionally another



stem of grass can be added without changing the diameter of the layer of material being bound in place. As the basket material is woven outward from the center of the bottom and up-

the basket material is woven outward from the center of the bottom and upward to form the sides, an interesting spiral effect is created by the exposed butt-ends of the needles.

It takes Juanita about one week to make a small basket, two weeks to weave a large one. These particular baskets have never been regarded as show pieces by Juanita or the other members of her tribe, but are considered as practical utensils much in demand because of their great strength and durability.

To me they are a fascinating piece of American handicraft and one of the most interesting products of the Indians' weaving skill. As nearly as I can determine, Juanita, now 77 years old, is the last living person who makes these pine needle baskets in this area. Local Indians have told me there was one other Indian lady who lived near Warner Hot Springs who made and sold similar baskets in the last decade, but she passed away four years ago. So upon Juanita Nejo there probably depends the sole responsibility for per-

HOLDING IN HER MOUTH THE AWL WITH WHICH SHE PUNCHES HOLES FOR BINDING, JUANITA ADDS PINE NEEDLES TO BASKET

petuating this phase of her people's heritage.

It is true that when Juanita's wistful eyes fondly examine her last completed pine needle basket, the art of making them still will not be considered "lost." The Smithsonian Institution in Washington, D.C., has, for instance, reconstructed the method used by the Rocky Mountain Indians in the complicated process of making hunting bows from mountain sheep horns. It is the Smithsonian's stated opinion that this particular art, though now unused for many years, is still not officially lost.

And so it will be with Juanita's baskets. The white man will know what materials to use and may someday eventually become proficient in the art of making these baskets from pine needles, grass and reeds. He might even invent a machine that will manufacture these baskets by the thousands at the mere touch of a button. But no white man, regardless of his ability to perpetuate knowledge or to produce in quantity, can ever weave into the form of a pine needle basket Juanita's childhood memories.

111

Bogus Baron of Arizona

Amazing Jim Reavis and his magnificent fraud

By Oren Arnold

I challenge any author to put Jim Reavis in fiction and not have first the editor and then the public say it is gross exaggeration. And yet—it was here to our Southwest that the most extraordinary men and women came to fight and live and love and play. I swear to you now, in preface, that the story I am about to tell is taken from authentic sources, especially the cold factual records of a United States court.

-Oren Arnold

N ONE SUNNY morning in the 1880s, loafers in the courthouse plaza at the frontier town of Phoenix were startled to see a magnificent horse-drawn carriage coming into view. Not two or four, but six gorgeous white animals were dashing up the dusty street, and the coach they pulled was rich with color topped by a golden coat of arms. The driver was in uniform, and a footman sat beside him—just like something out of a storybook.

"Ho-o-o-o-o!" the driver reined in beneath a shade tree. The footman bounced around to open the coach door. Slowly, with infinite dignity and hauteur, a tall gentleman of obvious Spanish heritage stepped down. He wore the picturesque clothes of old Spain.

"Proceed to the leading hotel and see that the Baroness is made thoroughly comfortable," His Excellency commanded. "I shall first make my official call."

The carriage drove on, and the stately gentleman, nodding to the knot of staring men, asked at once to see the commissioner in charge of United States lands. When he had been escorted to that official, he spoke.

"I have the honor to announce myself, sir," he bowed formally, "as Don James Addison de Peralta - Reavis, owner of *La Baronia de Arizonac.*"

The commissioner, duly impressed, hastened to give him a chair, and then said, "Please be seated, Don James. I have been expecting you."

The land commissioner had truly been expecting Don James, but no one else had. There had been posted a certain "manifesto," suggesting that he would be coming. But the manifesto was a thing in legal phraseology and nobody had quite understood it. Nobody, that is, except the officers, and they were reluctant to explain its content. The few citizens who had bothered to ask were told, and then mostly went away scoffing. The whole thing was fantastic, too much so for them to accept.

Now here, however, was the Baron himself. He presented credentials—not that any were necessary for so imposing a man—and stated that his agents would be here immediately to attend to business details.

"Dona Sofia Loreto, the Baroness, and I will remain for a short time also," he stated. "We wish to relax a bit, hiking and hunting in the baronial hills."

"Yes sir," said the commissioner.

News of the baron and his equipage—followed promptly by a more efficient retinue of secretaries and such—took the countryside by storm.

Arizona farmers and ranchers and miners dropped their work and came to town. Quite a few, it is told, even came with rifles and knives, being unsure of the kind of catastrophe now threatening. But it was not a matter for violence (although the talk did become vehement at times). It was a matter of convincing the people that the startling news was true, a task in which the officers for both the federal government and the Territory had to cooperate.

"Yes sir," the commissioner summed

Oren Arnold of Phoenix (in the winter months) and Laguna Beach, Calif., (in the summer) has been a free lance writer for 25 years. His work has consistently appeared in top national periodicals, and he is the author of 22 books (two more are scheduled for publication in the next few months). Adele and Oren Arnold have three daughters, two granddaughters and a tiny grandson.

it up to a group, a serious committee, "whether you like it or not, friends, this here is the real owner of most of this state. He is the real Baron of Arizona, just like he says, and he got all this land from the Spanish king. He has been investigated thoroughly, and it's every doggoned bit true, I'm sorry to say. Everybody here is squatters on his land, and under law he can run you off or make you pay. That's just what he's here to do."

"But my lord, man, this here is America!" the chairman objected strenuously. "This is not Spain! He can't come in here and . . ."

"That don't matter. Under the Treaty of Guadalupe Hidalgo, in 1848, when the United States got Arizona, this nation agreed to respect the private land claims as granted under Spanish dominion. And away back in 1748 old King Fernando VI granted this Barony to a friend. This man here now, by marriage to that Spanish wife of his, is the legal heir. Shucks, men, I don't blame you! But there's nothing to be done, I tell you! We been trying for weeks to dodge this thing. It can't be dodged. It's been taken to Washington, and to Madrid, and to Mexico City and everywhere. It's legal as night and day!"

"Good god!" breathed the committeeman, a prayer more than a profanity. "His papers—the inheritance —it—?"

"Yes sir!" the commissioner emphasized. "We've looked into that thoroughly. Had certified copies of the whole thing sent here from Madrid and Mexico City, right from the monasteries where they keep official documents over there. The line of consanguinity, the blood relationship, is perfect. It comes down to this Dona Sofia, which Don James married. It's

hers, right enough, and therefore his by marriage. Men, I'm sorry as hell, and we've done every possible thing to find a crack somewhere, but there ain't none. It's federal law."

ain't none. It's federal law."

"But say," a citizen cried, "I been on my ranch for nearly 20 years! Now to stay on it I got to pay him over \$3000! I can't do it. I never had \$3000 in my life! And I got friends who're being charged from \$500 to \$5000 for quit-claim deeds to their property. He oughta be hung!"

The commissioner shook his head. "I'm as sorry as can be, men," he repeated, "but there just ain't a thing to be done."

Incredible as it sounded, the situation had to stand.

Don James was not pre-emptory. He regretted sadly (so he said) to see numerous families thrown out of their homes. But, business was business.

He did not demand all the money instantly. If a few weeks or months would help — until crops could be harvested, ore smelted or sold, cattle taken to market, or some other arrangements made—why certainly. He openly chastised an unrelenting agent for being too hard on a pleading farmer; cut the farmer's feudal fee exactly in half, from \$2000 to \$1000, and gave him six months to gather that. Oh no, Don James had no disposition to be unkind!

Meantime, too, the magnitude of the land claim was gradually being understood by the people, and with this understanding came a new and transcendant awe of the Baron himself. People began to study a map of the official Barony of Arizona. It began in New Mexico, near the town of Silver City, and spread across eastern Arizona to a line west of Phoenix. North and south, it was 75 miles; east and west, 225! Twelve million acres!

In that decade of the 1880s, when wild Apache Indians were still a problem in Arizona, the land was worth no more than \$5 an acre or so, on the average. But \$60,000,000 has always been a goodly sum

been a goodly sum.

Except for Tucson, virtually every major town in the Territory was within the baronial bounds. Some of the world's finest grazing lands, mineral deposits and lumber stands were there, not to mention the farming sections.

A poor farmer could do nothing but take his medicine, pay or get off. But the big interests fought back. They could afford it. A group of attorneys were hired by the Southern Pacific Railroad to defy the imperious Baron, but in a few months the railroad closed the matter by writing him a check for

\$50,000—fee for a right-of-way across his lands! Similarly did big mine operators look into his claims—and pay. One estimate says that mines paid him more than \$100,000.

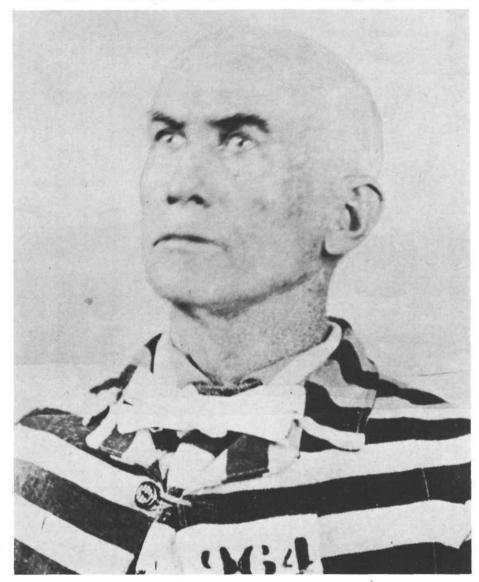
When attorneys tried to find a loophole in the legal armor of Don James Addison de Peralta-Reavis, Baron of Arizona, they faced two things; first, a flat statement from the United States government that this country had to live up to its Treaty with Mexico; second, the fact that Don James had become intimate, in a social way as well as in business and politics, with such nationally-influential men as Roscoe Conkling, Charles Crocker, Robert G. Ingersoll and Collis P. Huntington. The Baron went into their homes, heard them tell the public that they had looked into his records and found his astounding claims just and true.

The Baron and Baroness traveled extensively. They maintained elaborate homes in Washington, D.C., and St. Louis, and were planning to erect a rancho grande in Arizona on their own lands. They loved to go abroad. In Madrid, the American ambassador

to Spain once entertained the picturesque couple at a formal banquet and ball. They were received by state officials everywhere, honored by fiestas in Mexico, presented with precious gifts. They gave generously to charity and public service funds. One public drinking fountain cost the Baron \$1500.

When in Arizona, the Baron and Baroness would mingle democratically with the common folk, attending the larger dances and social functions. After a while the couple had twins; everybody said the little fellows, dressed like their parents in Spanish finery, were irresistibly sweet. All of this served, in time, to impress the Arizona citizens deeply. They who had been hardest hit, forced to pay until it hurt, were actually developing a loyalty to the Baron, saying that he was the outstanding citizen of the American West.

The success of his amazing claim of course prompted other people to dig up forgotten land grants, and while most of these were small in comparison to the Barony, they did become



ONLY KNOWN PORTRAIT OF THE BARON, JIM REAVIS, IS THIS PRISON PHOTO

an annoyance. These claims grew into a big political issue, resulting in the creation of the Federal Court of Private Land Claims, charged with investigating all land difficulties.

"It is an excellent idea," Don James the Baron said. "I am annoyed by constant bickerings anyway. For this court, why not bring the original papers from Mexico and Spain, not copies but the actual signed grants, dating from the creation of the Barony? They can be brought here safely under seal, inspected then returned."

The land commissioner in Phoenix welcomed the suggestion. It would indeed stop the lingering questions of suspicious folk, settling the matter once and for all.

The Spanish and Mexican governments cooperated, and within a few months the original papers, from the foreign monasteries, reposed in a Phoenix vault. And this is where Tom Weedin comes in.

Tom Weedin was a humble printer from Florence, Arizona. For a hobby he collected old documents, old manuscripts, samples of old printing of any sort, and loved to inspect those he could not own. Naturally, he was anxious to see the Baronial grant documents, and obtained permission to do so, under guard.

He sat for long hours inspecting the quaint old documents, reading them, comparing them, studying them with a hobbyist's keen pleasure.

Then, with no preliminary hint at all, he suddenly made a discovery.

"Good lord!" he exclaimed, staring at a page.

The guard became curious, but Tom

revealed nothing then. He hastily looked at several other sheets, holding them up to the window light. "I—I got to go!" he cried, hastening away.

He went quickly but quietly to a federal officer.

"L-l-l-listen!" he stammered in his excited whispering, "them Peralta-Reavis papers — the Baron's land — them papers is faked!"

"Hey? What's that?" the officer was instantly alert.

"It's a fact! I been looking at them.



AFTER BUBBLE BURST, DONA SOFIA BECAME A CHAMBERMAID, FADED INTO OBSCURITY

There's one printed from a type invented in 1875—but it's dated more'n a hundred years earlier—1748!"

"You mean — ? Why Tom!" the officer was amazed.

"Y-yep! And another'n says it was

printed in Madrid, Spain, in 1787. But it's got a watermark on it from a Wisconsin paper mill. And that mill wasn't even founded until after the Civil War!"

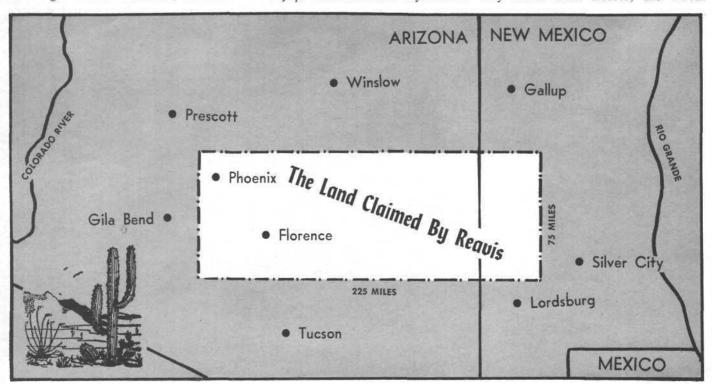
"Most amusing," said Don James, "as well as annoying. Give the man a little money and have done with him."

He was talking with his agents, who had come to him with news of Tom Weedin's discovery.

But they couldn't bribe Tom Weedin.

Moreover, in a very short time Don James himself was under arrest. At first he acted indignant. He raved grandly, denouncing and threatening and warning of reprisals, but the federal officers went quietly ahead until court convened. They had not acted impulsively. They had sent operatives everywhere to gather evidence — to California, to Missouri, to Mexico City, to Madrid. They were prepared when court convened.

Don James still tried to maintain his magnificent bluff. A lot of ordinary citizens were indignant for him, declaring he was being "framed" by wealthy folk. But the federal officers went right ahead. They pounded at him, tearing down his claims step by step. There had really been no land grant, said the officers; no Baronia de Arizonac, no long line of inheritors, no baron or baroness. Don James de Peralta-Reavis was simply Jim Reavis, ex-Confederate soldier, former mulecar driver in St. Joseph, Missouri, who dreamed of grandeur and had come to the desert country to make his dream come true! There hadn't been any Dona Sofia Loreto, she whom



Jim had described as an "exquisite, dainty Andalusian beauty" descending direct from the first Baron of Arizona. She had really been not a Spanish senorita, but an Indian waif, parentage unknown, reared in poverty in Arizona or California by a white family named

The lady herself admitted that, in court.

"Oh it is true!" she sobbed dramatically. "He took me from my home there, told me I was really a Spanish girl with a rich inheritance. I loved him, and believed him. But I know now it wasn't true!'

He had faked records of her ancestry there, saying she was born of wealthy Spanish travelers during a rainstorm. The records told every detail, even the birth pains of the mother when Sofia Loreto was born.

Still further, Reavis had never really married her. The wedding ceremony was false; her twin sons were illegitimate. She never suspected until he admitted it on the witness stand.

But as to the astounding land claim -how was it created? Were not the land records taken direct from the official monasteries in Mexico City and Madrid? Did not the government agents go there and verify that fact when the "Baron" first notified the U.S. Surveyor General?

Truly so. But for a man of Jim Reavis' energy and imagination, getting the records placed there presented but little obstacle.

He had conceived his daring plan, he told, when he first heard of a small faked Peralta grant in the Southwest, an item mostly forgotten. On that thought he began building. Heading west from Missouri, he got a job as traveling correspondent for a San Francisco newspaper. It paid him a little, gave him precious credentials. With them he went to Mexico, then sailed for Spain. In the meantime he had mastered the Spanish language-both "modern" and "ancient."

He went into the monasteries and asked to see the ancient records in order to write newspaper articles about them. Obligingly, the guardian priests and monks let him in, even aided him. So Jim Reavis poured over the old papers long and studiously, returning daily for several days.

"It was easy to hire printers or street scribes in Madrid," Reavis' confession tells, "to print or write any document I desired. They could imitate old script and language style perfectly. By careful study, I was able to dictate documents in the same style of those filed in the 1700s. I even imitated their quaint phraseology and idiom.

"I would take these faked sheets

into the monastery vaults, tear out a few of the old true pages, and insert the faked ones of my own. The priests never knew.

"In curio shops of Madrid," Reavis testified, "I found a number of old hand-painted miniatures of men and women, people long forgotten. bought them for a few centavos, gave each a name, told my wife they were her ancestors. They were pretty paintings, aged just enough to be convincing. She believed." These were introduced in court as evidence against Jim. One named the first Baron of Arizona-he who was so close a personal friend of King Fernando in 1748 that the king gave him 12,000,000 acres in Arizona.

That first baron, incidentally, had been given a very thorough build-up by his creator, Jim Reavis. His name was recorded as Don Miguel Nemecio "the legitimate son of Don Jose Gaston Gomez de Silva y Montes de Oca de la Cerda y de Carrillo de Peralta de las Falces de la Vega."



TO PROVE HIS CLAIMS, JIM REAVIS INVENTED ARISTOCRATIC PROGENITORS FOR HIS WIFE. HE ASSERTED THAT THIS COURTLY GENTLEMAN IN PORTRAIT WAS "DON MIGUEL NEMECIO, THE FIRST BARON OF ARIZONA, AT AGE 30."

All told, the documents tracing the ancestors, personages, titles, descriptions, emoluments, boundaries and incidentals of the vast Baronia de Arizonac, brought right down to 1885, totaled in excess of 80,000 words! Imagine the patience and industry necessary to forge so many documents. Few modern novels are that long. (This article runs about 4000 words. as a further basis of comparison.)

That Jim Reavis, a mule-driver, should have the imagination to conceive so audacious a forgery, is the first miracle in his career. Secondand greatest-is the fact that he actually carried it out, did all the work, did it so perfectly that he completely hood-winked first his wife and then the shrewdest investigating officers of

three countries.

Despite the fact that she had never really been married, Dona Sofia Loreto was granted a legal divorce. Penniless -a cinderella with not even a golden slipper left—the ex-Baroness got a job as chambermaid.

Of course Jim Reavis was guiltyhis confession settled that — and so was faced with court sentence. Horsethieves they hang-but the Baron of Arizona drew a six-year sentence, and he only served two of them!

He came out a free man and immediately set out brazenly to rebuild his empire. He returned to Phoenix, claiming he was a victim of circumstance. He had plans for promoting a vast irrigation project. He would take water from the Salt River, he said, and move it onto desert land in south-central Arizona, transporting it by canal and 20-mile tunnel through the Superstition Mountains.

His proposal received considerable serious attention—until a government engineer pointed out that the land to be irrigated was many feet higher than

the proposed damsite.

"I saw Reavis in Phoenix about 1910," one resident there tells now, "and he was an old man talking all sort of crazy schemes. He was going to launch a big magazine. He had invented some weighing scales that would replace all others known. He was going to do this and do that.

"He had, I remember, a deformity by the side of his nose, and people said it was caused by a bullet or knife wound, but I never knew anything about it for sure. Never heard of him having any trouble of that sort. He operated in a different way.'

The superintendent of the New Mexico State Prison, where the Baron served his two years, stated that Reavis was seen in Washington, D.C., in 1916. The record ends here. Reavis fades out of the Arizona scene as mysteriously as he faded into it. ///

CACTUS GARDENING

for the BEGINNER

By LADISLAUS CUTAK *



THE PERSON who enjoys himself most in life is usually the one who cultivates a hobby. More people would be happier in this busy world if they had some kind of recreational pastime to ease their minds and bodies.

I know that I'm biased, but I think gardening — especially cactus gardening—is a wonderful hobby. It is certainly relaxing, and it doesn't take a great deal of money or time. Everyone can participate — young or old, city dweller or hermit.

It's very easy to become a cactophile ("cactus lover"). The urge to cultivate cacti may come after a visit to the desert when the cacti are in bloom, or you may catch the "fever" from viewing a Josef Muench photograph of a cactus in this publication,

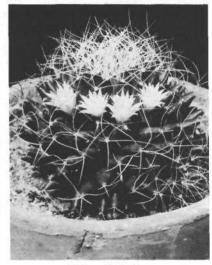


SAND DOLLAR CACTUS

or a cactus display in a friend's garden, or a lone potted cactus on a city window sill. Usually — after this initial interest takes hold — the neophyte makes a search for cactus information and suddenly a whole new world opens up.

Did you ever stop to think, for instance, how the cacti originated and why they assume such grotesque and bizarre shapes? Mother Nature covered the mountains in temperate zones with towering pines and firs. She clothed the plains and meadows with luxuriant grasses and colorful flowers. She endowed the tropics with lofty palms, delicate tree ferns and lush vegetation of various sorts. But when it came time to dress the desert she evolved the most fantastic creations, realizing full well that plants of mountains, plains and tropics could not survive the rigors of arid lands. So she gave the desert cacti strong woody stems, she moulded layer upon layer of water-storing cells, and covered them with a tough thick skin so that the moisture could not escape, the sun burn or the fierce wind break.

Nature supplied some cacti with ribs or ridges so the plants could contract and expand without dire consequences when they had to use their stored water in times of drouth or greedily replenish it after infrequent rains. Leaves would be of no use to cacti, so the stems took on their work. The leaves became spines—long, short, straight, twisted and hooked—spines that would act like lath to protect the plant from the burning sun, or like spears to turn back thirsty animals trying to get at the precious stored water within the plant. Thus, cacti present a fantastic array of weird, grotesque and often ludicrous shapesadaptations necessary to survive the hardships imposed by their inhospitable environment.



BIRD NEST CACTUS

* The author is eminently qualified to introduce Desert Magazine readers to the delights of raising cacti as a hobby. He is horticulturist in charge of the great cactus collection at the Missouri Botanical Garden in St. Louis, and a recognized world authority in his chosen field.

Ladislaus Cutak is one of the pioneers in the attempt to popularize science in order to make it more interesting to the lay reader. But "when necessity demands he can become technical as evidenced in some of his masterful theses published on the 'Cactaceae'," writes the "Cactus and Succulent Journal" of Cutak. In the main, however,



EASTER LILY CACTUS

Cutak "does not care to become too scientific."

He made his first cactus collecting trip to the desert in 1935. Many cactus expeditions into the Southwest and Mexico have followed. He takes photos as he botanizes, and his slide-show lectures are among the most popular in the St. Louis area.

Cactophile Cutak goes out of his way to champion his often maligned "babies."
"You don't have to pamper cactus," he says.
"Just give them a little attention and they will more than reward your efforts." Often, when describing how little care a particular cactus might need—or how much abuse one can take—he will end up with a scornful: "Try doing that to a rose," or "Try that on a begonia and see what happens."

Cutak is author of two books, "Cactus Guide" (1956) and "Cactus Personified" (1959), as well as numerous articles and papers on cacti. Although cacti seem repulsive to the unknowing person, they produce some of the daintiest and most gorgeous blossoms in the entire kingdom of plants. Here is found a bewildering array of color in all its various hues. The texture of the petals is as delicate as that of an orchid's, often possessing the sheen of velvet and satin. People are often amazed when they see blossoms of such rare beauty produced by these lumpy spiny stems!

Not all cacti live on the desert. Some have wandered to the jungle forest and there attached themselves to the trunks and branches of trees. Often hanging in dense festoons, their stems have assumed slender cylindrical shapes. Other cactus stems have become flattened and leaflike, spreading out in the manner of orchid plants. These plants don't need spines to shield their bodies from bright sun or for protection against animals, but when spines do appear they usually are hairlike and sparse in comparison to the wicked armament found on the forest cacti's desert cousins.

In the cactus family there is much mimicry. Some of this is understandable, especially in the spineless forms. In order to escape detection the plant evolves a general appearance that resembles the object nearest it. Often it takes an expert to spot one of these plants, good examples of which are the many "living rocks" almost indistinguishable from the stones among which they grow. With some, the mimicry is not so pronounced, but on the whole (and using a little imagination) one can visualize similarity to many inanimate objects as well as other plants (and even people).

I get a kick out of cacti that put me in mind of something else. I think everyone should look deeper into the plants growing around us. When you do, you will learn to appreciate the common names these plants bear—Chain Cactus, Chin Cactus, Christmas Cactus, Cow Cactus, Crab Cactus . . . The long Latin botanical names will come later.

I recommend that the beginner start a collection of the better-known cactus types, graduating in time to the field of rare cacti that challenge even the experts' horticultural prowess.

One of the easy flowering plants is the Twisted Rib Cactus (*Hamatocactus setispinus*) from Texas. This plant usually starts blooming in early spring and continues into fall. The flowers, a beautiful satiny yellow with red centers, are followed by a tiny ball-like scarlet fruit about the size of a cranberry. The name, Twisted Rib,

is derived from the plant's undulating or spiraling ribs. This variety is globular to columnar in shape and may reach a foot in height.

Another easy flowering cactus is the Bishop's Cap (Astrophytum myriostigma), a remarkable deeply-lobed plant, entirely spineless, usually with five very pronounced ribs along whose edges grow rows of wooly areoles. The plant body is densely dotted, giving it a grayish-white stonelike appearance. Its pale yellow flowers are fairly large, borne near the top of the plant. These blossoms begin to appear early in spring and continue into fall.

Closely related to the Bishop's Cap is the Sand Dollar Cactus (*Astrophytum asterias*). It has a flat domeshaped body divided by deep grooves resembling the marine animal by the same name which lives on the sandy floor of tropical waters. The flowers are yellow, shading to red in the center. The fully-expanded petals often obscure the small plant.

The Dumpling Cactus (Lophophora williamsii) is a curious small plant with a globular body sometimes shaped like a toy top above ground and a thick turnip taproot below. The plant body is soft and pliable like a dumpling, hence its common name. Flowers are borne in the center at the top, and are pinkish in the Texas forms and nearly white to greenish in the Mexican varieties. Slender pinkish club-shaped fruits follow.

The Chin Cacti are very popular for window sill displays. They hail from South America and are globular to cylindrical in shape, very free flowering and therefore popular with cactus fans. The flowers come in shades of



BISHOP'S CAP CACTUS



A BACKYARD EXHIBIT OF POTTED CACTI

white, green, yellow, pink and red. Botanically known as *Gymnocalyciums*, there are about 50 species to choose from.

Another popular South American cactus is the *Echinopsis* group which bears the common name Easter Lily Cactus or, as some prefer, Angel's Trumpet Cactus. The individual globose-to-short cylindric heads produce an abundance of "pups" which can be detached easily from the mother plant and grown individually to maturity. The long trumpet-shaped flowers begin unfurling at dusk and stay open until the following mid-day. Sometimes these flowers will bloom for two successive days.

There are a number of "Living Rocks," but the best known is Ariocarpus fissuratus which hails from the hot barren lands of the Big Bend country of Texas. The upper-part of this cactus looks like a delicatelychiseled stone object. It is composed of horny triangular tubercles, fissured and warty. From the center of this crown arise beautiful pink to deeprose-purple flowers, succeeded by small pale green fruits. One thing to remember about the "rock cacti" is that they should be kept on the dry side, especially during the winter or dormant season. Too much water will reduce these plants to mush. This rule holds for practically all desert cacti. If you must err, it is best to give less water than too much.

Darlings of the cactus family are the "pincushions," botanically known as *Mammillaria*. There are about 300 kinds to choose from, and each is a

THE ULTIMATE IN CACTI DISPLAYS—THE HUNTINGTON BOTANICAL GARDEN IN SAN MARINO, CALIFORNIA. THE AUTHOR EXAMINES MOUNDS OF BEAUTIFUL PINCUSHION CACTI NESTLED BETWEEN ROCKS AND BOULDERS.

fit subject for the window sill. These globose, hemispherical or cylindric plants are characterized by nipples or tubercles crowned with a diadem of slender spines. In their native habitat some *Mammillarias* produce clumps of hundred or more heads, each producing a coronet of charming blossoms in various colors.

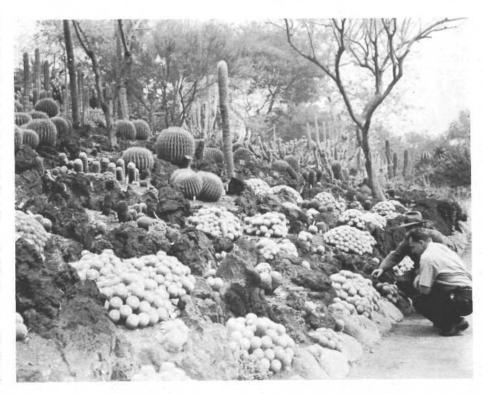
Some old-time favorites found in many homes are the Rat-tail, Christmas, and Mistletoe cacti. These are classed as jungle inhabitants, usually found growing on trees in tropical forests. The Rat-tail is a Mexican vinelike plant with weak pendent pencil-thick stems up to six-feet long. It bears beautiful crimson-pink flowers that last for several days. These blossoms resemble somewhat the Thanks-

giving and Christmas cactus flowers in shape and color. The latter two cacti are almost identical in appearance, with flashy flattened leaflike joints. They do exceptionally well when grafted onto a sturdy upright stock, for then the plants are able to display their lovely flowers to better advantage.

The Mistletoe Cactus (*Rhipsalis*) is a hanging bush with tiny whitish flowers turning into white semi-transparent berries.

These are but a few of the cacti recommended for the beginner. All are easy of culture, flower freely, and guaranteed to start you on an enjoyable hobby.

Coming in the
SEPTEMBER
Desert Magazine:
Ladislaus Cutak's
"The Cactus Hobbyist
Learns Propagation"



How To Get Stung By A Scorpion

- continued from page 19 -

- Arm-scorpion under canvas.
- Hand—picked up wash cloth. 24
- Lower leg scorpion ran up pants leg in cotton field.
- Elbow scorpion on pillow on 26
- 26 Finger — removing soiled jeans from hamper.
- 28 Wrist — handling used adobe bricks.
- Finger tried to kill scorpion 31 with piece of tissue.
- 33 Hand—while sorting laundry.
- 38 Hand-scorpion in vegetable bin.
- Thigh-rolled over on scorpion
- Breast and chest scorpion fell from drapes, down neck and inside brassiere.
- Finger—reached into paper sack which had been on ground over-
- Finger—unboarding windows of cabin.
- Forearm putting clothes in closet.
- 62 Arm-brushed against bush.
- Foot and finger-picked up wash cloth in sink and was stung on finger; threw scorpion to floor and was stung on foot.
- Toe-walking barefoot in bathroom.

After studying the above tabulation of "successes," undoubtedly your creative personality can add other techniques. Incidentally, the experience may not be as thrilling as you had expected, and then again it may go beyond your expectations. In either case, it would be wise to react appropriately. This consists of putting a tight tourniquet between the site of the sting and the body, if the spot is on one of the extremities. Of course, if you should be stung on the face, it might prove embarrassing to follow this advice. Immediately after the tourniquet has been applied, place a piece of ice on the site of venenation and prepare a pan with ice and water. Now place the member in the iced water well above the point of ligation. After five minutes, remove the tourniquet. If this cryotherapy is kept up for two hours, the venom will be adequately dissipated and serious consequences can be avoided. After this, you can brag to people how cool you were in the emergency.

There are approximately 30 species of scorpions in the Southwest. The most widely distributed are:

Hadrurus hirsutus, H. arizonensis, and H. spadix. The giant hairy scorpion, attaining a length of 5 inches.

Vejovis spinigerus. The stubby, striped-tailed scorpion. Average size about 2 inches.

Vejovis flavus. A light yellowish scorpion with moderately slender tail and pincers. Average size about 11/2 inches.

Paruroctonus mesaensis. A light yellowish scorpion with slender tail but broad pincers. Average size about 21/2 inches.

Superstitionia donensis. A small, brown, very shiny scorpion. Average size about 34 inch.

Anuroctonus phaiodactylus. A brown, moderately slender tail and broad pincers, with a lighter colored sting-bearing ampulla. Often called the shiny stinged scorpion. Average size about 2 inches.

Uroctonus mordax. A small, light to dark brown, moderately slendertailed scorpion. Average size about 11/2 inches.

Centruroides sculpturatus. A strawcolored scorpion with slender tail and pincers. Also, a small tooth or tubercle at the ventral base of the sting.

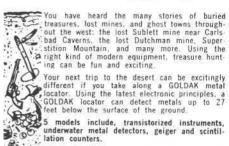
The other species are not widely distributed and the populations are generally small.

Of the above species, all but the last mentioned have a venom that produces a local reaction primarily. In a severe case, the venom at most will produce a moderately swollen and discolored area at the site of the sting and will produce a mild-to-very-painful burning sensation. People do not show a hypersensitivity to scorpion venom, except for Vejovis flavus. Outside of such a reaction, the venom of these seven scorpions would not be lethal, not even to a tiny infant.

The last-mentioned species, Centruroides sculpturatus, has a potent neurotoxic venom. The natural sting of a single scorpion has been responsible for the death of a 16-year-old boy in good health. The site of the sting does not swell or become discolored. No visual local symptom is produced. The site of the sting becomes hypersensitive to touch, a slight bump sends a tingling sensation through the stung member. This is an excellent characteristic to use in diagnosing venenation by a lethal scorpion. Other scorpion or rattlesnake venoms will not produce this hypersensitivity to touch. Severe reactions to the venom consist of very copious drooling, chaotic convulsions, distended abdomen, blue lips and fingers, and perhaps respiratory or heart failure with consequent death. A severe sting of a single scorpion will be lethal to children unless proper treatment is instituted at once.

The lethal species are largely confined to central and southern Arizona and small portions of adjacent states. The Poisonous Animal Research Laboratory of the Arizona State University of Tempe, Arizona, manufactures and distributes scorpion antitoxin gratus to Arizona physicians.





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GLENDALE, CALIF.

The Desert of Owyhee

— continued from page 11 —

which, of course, includes the county officials. There is no feeling of being hemmed-in in this part of the world.

Owyhee presents a broken kind of topography. Seven mountain ranges, the Ruby, Silver City, Juniper, South Mountain, White Rock, Elk and Owyhee Highlands, are haphazardly scattered over the county. Between them are more or less level areas, except where intersected by the river canyons. Generally speaking, the altitude of these flat areas is lowest at the northern boundary and increases in elevation to the south. The northern area is known as the "lake-bed desert" portion because it is closely associated with ancient Lake Idaho, the size of which is roughly outlined by the exposed lacustrine sediments which extend from east of Glenn's Ferry west into Oregon-an area of almost 20,-000 square - miles. This tremendous lake lasted until a break occurred in its northern wall, causing its water to drain out through the present Hell's Canyon of the Snake River.



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The lake-bed desert is roughly divided into two parts, the first of which, from 2200 to 2500 feet altitude, lies along the Snake River and is composed of more or less unconsolidated sand, silt and gravel in flood plains, landslides and dunes. The rest of the lake-bed desert, above 2500 feet and below 3300 feet, is mainly what the geologists have called in the past the "Payette Formation." This consists of somewhat more consolidated sand, silt and gravel from the shores, tributaries and beds of ancient Lake Idaho. In the "Payette" are also found sandstones, tuffs, diatomaceous earth and a little lignite. Thin basalt caps are seen on some of the erosional buttes and mesas here.

The lake-bed desert is the driest part of the county. The vegetation is low and sparsely distributed. It supplies meager spring pasture for sheep. Some of the soil is nearly as white as chalk. In places the whiteness is overlaid by dark basalt so that the effect might be compared with vanilla ice cream topped with chocolate sauce. Murphy concentrates its few buildings in a corner of the lower lake-bed district.

Owyhee appears peaceful enough now, but amateur geologists can find many records of past activity. As the old rocks of the district wore down, lake and stream deposits covered the low places, and lavas welled up to add their layers. The various seams are still in evidence. Crustal pressures produced uplifts and faultings, and mountains again rose to great heights. In the meantime, the streams began their destruction so that channels and canyons were deepened. Obstructions had caused the ponding of the river and the creation of Lake Idaho. Into it the streams poured their loads of material and the wind blew volcanic dust until the lake was filled to a depth of approximately a quarter of a mile. Intermittent lava flows further increased the deposits.

Traveling south you pass from the lake-bed desert to the escarpment of the Owyhee Plateau. The sediments of the lower region are replaced by material called the Snake River basalt, but some of the streams have cut down through this basalt to an acid volcanic lava, rhyolite.

The occurrence of fossils presents other information about early conditions. These evidences of ancient life have been widely found in the county.

From a study of these fossils, the experts have established that ancient horses, mammoths, elephants and mastodons once lived in the area.

Though a desert area, Owyhee County has been the scene of much activity. Few regions have been so fervently cursed by their first visitors! Its early history matches the harshness of its physical characteristics. Wagon trains traversed it; fur companies exploited it; miners found precious minerals in quantity. But people made no easy bargains with the Owyhee area. The tales of the fur traders record the lack of grass and a shortage of game which forced them to live on the carcasses of the beaver whose fur they sought. Travelers found the mountain passes difficult and rocky. Freighters tested the Snake as a possible means of transportation. The river, unnavigable in spots, crushed the frail boats and, after strewing their contents on the water, often drowned the rivermen.

The name "Owyhee" was given to the region after three Sandwich Islanders, employed by the Hudson's Bay Company as expert boatmen, were killed here by the natives. The name Owyhee is said to be a corruption of Hawaii, the island from which the men came.

The thieving Snake and Bannock Indians became actively hostile, but not all the crimes of the Owyhee were perpetrated by Indians. White des-

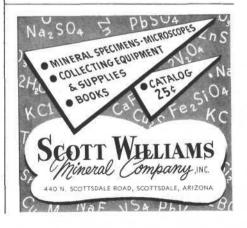
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peradoes, in the best Western tradition, held up the stages and robbed men who had accumulated stakes at the

Nothing deterred newcomers; during much of the 19th Century this desert area was constantly visited by emigrants, miners, explorers, fur trappers and adventurers. Idaho became part of the battleground of the great competing fur companies.

The names of traders and trappers regularly appeared in the records of the period. Pack outfits carried the fur to St. Louis and other markets. The mines brought in eager fortune hunters and filled the hills with mining camps, some of which had populations of several thousand. They are now ghost towns whose buildings are fast crumbling.

The population of these districts and the activity of the fur traders decreased with the exhaustion of the mineral and animal resources, and today the county has largely lost its importance as a fur and mineral producer. In the meantime, perhaps 90 percent of this desert area has gone along with little change. Stock grazes

DESERT QUIZ ANSWERS

Questions are on page 18

- Joshua Tree.
- Relative hardness of minerals.
- Never tell the truth again.
- Control flood waters.
- Dry lakes.
- Roadrunner.
- Lincoln County War. Enchanted Mesa.
- Ocotillo. Indian Trader. 10.
- 11. White.
- San Juan. 12.
- Las Vegas. 13. Needles.
- 1821.
- 16. Pathfinder (also Pathmaker).
- River Guide.
- Stope.
- Eremology.
- 20. Bullfrog.

the forage areas almost to their production limits. A few strip oases support hay and stock ranches which are mostly the basing points for extensive range operations. Holdings among the large operators are figured in squaremiles, not acres. The little-traveled roads are much as they were a century ago-the soil undisturbed by the plow, the hills unfrequented by settlers and visited only by range riders. The wild animals build their burrows in the selfsame areas or roam the hills in search of prey, carrying on their daily activities as they did centuries ago.

But, what is the future of the Owyhee Desert? Much of it will probably remain as it is. Grazing will continue to utilize large areas of the mountain slopes and uplands where relatively greater rainfall produces more vegetation than is to be found in the lakebed desert. Water pumped from newly-drilled wells is putting more land into crops along the Snake River Valley. New methods in dry-land farming may add additional acres to those currently cultivated, but large increases in agricultural land are not likely to be made in the foreseeable future. Considerable mineral wealth undoubtedly remains in Owyhee mountains, but new exploration and higher metal prices are needed to revive mining in the region. A currently unexploited resource is recreation. Development of the many scenic wonders in the county will draw an ever-increasing number of tourists. It may be that the ultimate future of the Owyhee Desert lies in recreation, after a colorful history of exploration, trapping, mining and grazing.

Photo Hints for the Southwest

BOB RIDDELL

The trend in photography today is versatility and originality. Don't be afraid to experiment with your camera. Many of us get into what I call a "musclebound technical rut" and fear to venture from the usual techniques and principles of photography.

Don't misunderstand. Techniques like correct exposure, composition and lighting remain all-important; but you can still be creative with your camera and seek a unique way of shooting a scene regardless of subject matter. Maybe you have an idea which violates all rules of photography. Shoot the picture anyway—the results might be what you are after.

Deliberate distortion, for example, has its place, and the Southwest has many subjects on which to experiment: canyons, old buildings, ghost towns, corral fences, missions, cactus. Did you ever get low on the ground and shoot a saguaro cactus against the sky? Try it sometime. Take several pictures at different distances from the cactus, using a yellow filter to darken the sky.

Put more imagination and "searchtime" into your picture taking. Look for new angles, which means a new picture of Monument Valley, the Grand Canyon, the wide Mojave Desert.

It just isn't true that there are no new angles left for shooting even less sweeping subjects than the trio mentioned above. The picture illustrating this article is of San Xavier Mission, which has been photographed thousands of times. I will wager a bet that the angle shown here hasn't been photographed very many times. I searched for a deliberate "different" type of angle and purposely employed distortion and parallax to create the impression that the two towers are converging. I shot from a low angle, putting the white against the blue sky and used a yellow filter. Because white reflects light, I decreased my exposure one stop. You must do the same when shooting color.

Camera data: Rolleicord V, TriX film, exposure 1/125th at F16 with yellow filter.





People and Places Along Nevada's

Historic Humboldt River Trail

By PEGGY TREGO

Desert Magazine's Nevada Travel Correspondent

THERE have been some changes along the Humboldt River's course since Mark Twain noted that it was interesting to jump back and forth across the stream, and then, made thirsty by exertion, to drink it dry.

U.S. Highway 40 parallels the Humboldt through much of northwestern Nevada, but the river keeps itself hidden from travelers most of the way. You'll scarcely believe that in this big desert there are shade trees and picnic grounds at Rye Patch Dam a mere mile from the highway, but go look! And I'll wager you won't want to leave this startling oasis until you've spent hours swimming, boating, bass and trout fishing, and water-skiing.

Perhaps you will only want to break a long trip with lunch and a swim. (Bring your own lunch—there are no concessions here.) Or perhaps, like me, you'll camp nearby to see the full marvel of desert sunset and sunrise. In any case, don't make the mistake of thinking you have to suffer through summer's dry heat trapped on the scorching highway pavement.

Look for the sign, "Rye Patch Dam," on the east side of U.S. 40, 22.5 miles from Lovelock, 50 miles from Winnemucca. The oasis is well-hidden and the well-surfaced entrance road apparently leads only into flat desert as you leave the highway and make two railroad crossings. (Watch these crossings—visibility is good, but they are unguarded.) Then the "badlands" created by ancient action of the Humboldt River begin to appear — cliffs, bare ochre hills eroded into miniature Cathedral Gorges. Suddenly the fantastic gray-green lake,

winding into the distance between its stark banks, literally bursts into view. Straight ahead is the dam; to the left is caretaker B. C. Jarvis's neat house and the treeshaded picnic grounds; to the right is the bathing beach and boat landing. Mark Twain wouldn't believe it.

The opaque lake waters may not at first appeal to you for a cooling dip. The water is bitter to drink, but delicious for swimming, and the beach slopes gently—safe even for wading toddlers. If you've brought a boat along, you must get a launching permit from Mr. Jarvis. The permit costs nothing, and the rest of Rye Patch is also "for free."

Time was when the weary covered-wagon pioneers found the meandering and shallow Humboldt hateful, as they followed its



course westward. But, it meant life to them, and nowadays it means flourishing agricultural and recreational developments along its length. Rye Patch Dam was built in 1926, and its stored waters (179,000 acrefeet capacity) irrigate 40,000 acres in Lovelock Valley—"Nevada's Nile." Accordingly, the boating business in western Nevada has flourished and we Nevadans and our welcome visitors have an all-year playground to enjoy.

Rye Patch, for all its surprise and pleasure, isn't everything in the Lovelock-to-Winnemucca stretch. There are ghost towns and modern towns, old and new mines, and no end of good arrowhead hunting and rockhounding.

Lovelock's prosperous ranches, trees and lawns are today's counterpart of the "Big Meadows" of pioneer times where emigrants halted to gain strength for the long dry march westward to the Truckee River, and their wasted teams could feed on the lush wild grass. Long before the transcontinental railroad got here in 1869 there was a trading station; the town itself is named for George Lovelock's ranch, founded in 1862. The local folks make their livings today largely by ranching and mining, as they have for a century, and being on U.S. 40, they are also very conscious of tourist traffic. The small, knowing town has excellent motels, stores and restaurants — Felix's for thick steaks, the Big Meadow Hotel for very good and inexpensive family dinners of all kinds. The Turrillas family

members have operated both places for quite a while; Felix Turrillas is proprietor of Felix's, and his sisters and brother-in-law, Connie Turrillas, Clara and Martin Oroz, run the Big Meadow with old-fashioned hospitality.

A block west of the highway the unique Pershing County courthouse (an almost circular building) offers its shady lawns for picnics. The municipal swimming pool is open to the public, and there is a theater and a bowling alley.

You'll do well to spend some time in Lovelock, and make a few side-trips into the ghost camps. Arabia District (north and west of town some 20 miles) was one of the earliest mining areas (1860s), and its gold yield was fabulous. You can still find a few crumbled stone cabins marking the site of Trinity town, as well as a giant rabbit-warren of inclined shafts and mine dumps, if you are equipped to tackle sandy roads. It's best to ask locally for road information and routing — sometimes wet weather changes our geography.

Another, longer trip is to the sites of four towns that flourished 50 years ago on rich gold—Vernon, Seven Troughs, tragic Mazuma and Farrell—30 miles almost due west of Lovelock. A stone jail marks the site of Vernon, and a few buildings remain in Seven Troughs. Farrell's site is rubble and bits of desert-purpled glass, while Mazuma, wiped out by a flash flood, is strewn downhill for a mile below its former locale. This is real desert country—colorful craggy hills and long flats—so be sure to carry plenty of water and gasoline. Any Lovelocker can tell you how to get there—just head for Lone Mountain and keep going around its north side. The road is graded but rough in spots.

Seven miles north of Lovelock Eagle-Picher's diatomaceous earth mill sends up a smoke plume that marks the turnoff to Mineral Basin's flourishing open-pit iron mines 20 miles east. Another five miles beyond the mill on U.S. 40 is Oreana (site of Nevada's first ore smelter in the '60s) from which a dirt road takes off east for Rochester, a gold camp of 40 years ago, 10 miles distant. Rochester still has some buildings and massive mine dumps on its juniper-dotted hills. Keep an eye out for wild horses along here — there are still mustangs in this country.

For more ghost-towning there are the stone buildings and pleasant stream that mark Humboldt City, once-lively but dead these 80 years, which you reach by turning east a mile past Humboldt House. Humbolt House itself (32 miles from Lovelock) has a store, gasoline and refreshments. Its proprietor, Cecil Campbell, has lived his life in this country and if you find him with some spare time he can tell you plenty about it. Humboldt House was a famous "dinner stop" on the early transcontinental railroad; in even earlier times it was near here that the Lassen Cutoff Trail left the



Humboldt for the long hard trek to California.

For exploring the vicinity of the old trail, a good graded road leads west from U.S. 40 nine miles farther on. This road (its take-off is marked with a sign) also leads to Scossa, a mining camp of several decades ago, and to Majuba Mountain on whose steep side was America's only tin mine. The road past Scossa heads back to Seven Troughs District for a lengthy, interesting loop-trip back to Lovelock. There are a few antelope along here, so watch for the shy lovely beasts.

Imlay, the only real town between Lovelock and Winnemucca, is a true railroad community that "turns its back on the highway," to quote George R. Stewart's "U.S. 40." Imlay has a small well-stocked store down near the tracks, and Little Nevada on the highway's edge caters to those who want good food and drink. Presiding over the liquid refreshments is "Mac" Haines, who has done such things as play oboe with the Minneapolis Symphony, and who has a son who catches whopping bass in Rye Patch Reservoir.

Mill City, a few miles farther on, has no mill and no city any more though it offers refreshments and gasoline to travelers. A couple of miles past here is the six-mile road to Dun Glen, a thriving gold town of the 1860s whose few poplar trees and melting adobe houses are its only trace today. You can go on past Dun Glen over the East Range, and double back to U.S. 40 about 15 miles from Winnemucca if you're in the mood for wandering the back-roads. They're good, though bumpy.

Winnemucca is a larger town than Lovelock; here U.S. 95 to Idaho intersects U.S. 40, a reminder that Winnemucca has been a famous Humboldt River crossing for nearly 100 years. Winnemucca is the center of a rich ranching district extending northward, and those jeans and Western shirts you see on the streets are not rodeo costumes. A going, able town, Winnemucca (named for a famous Paiute chief) has what it takes for creature comforts. Its motels range from plush to plain (my favorite is Scott's Shady Court down near the river, quiet, spacious and on the inexpensive side.) The Humboldt Hotel in the

center of things knows what the traveling public wants, and provides it. The newer Star Restaurant across the street already has a reputation for A-1 meals.

If you want a special treat, go west on the main cross-street (Bridge St.) to the less obtrusive Winnemucca Hotel and have dinner Basque-style with the railroadmen, sheepmen, cattlemen, miners and a few other representative Nevadans. Get there by 6:15 p.m., because then (and then only) are the doors opened to the dining room. You sit at long tables, and marvelous food flies by—as much as you want of soup, salad, as many as four meat dishes and four of vegetables, potatoes, rice, spaghetti. With this comes a glass of wine or a cup of coffee or a glass of milk. Tariff is \$1.75, and youngsters (even little ones) are welcomed by friendly Angel and Frank, who run the place.

Don't be squeamish about entering through the bar—it's an old Western custom, and you'll probably find several ranch families complete with children waiting for the dinner-door to open. An old photograph on one wall shows you what the Winnemucca Hotel looked like in earlier days—it really hasn't changed too much. At the opposite end of town the equally unobtrusive Martin Hotel has much the same setup. Take your choice.

Winnemucca also offers a theater and bowling alley, public pool and golf course, stores and garages. And speaking of garages—Chris Swett's small establishment five miles west of town combines Chris's mechanical genius with his thorough knowledge and huge interest in all kinds of rocks. Genial Chris is another native Nevadan who really knows and loves this country; if he isn't too busy, he'll tell you any number of places to look for ores or rock specimens, and probably show you a few in his own collection.

With so much to see and enjoy, nobody need dread paralleling the Humboldt River's strange course through northwestern Nevada any more. Things have really changed since Mark Twain's day; Mark himself would like it now.

Don't hurry along here. Take your time, and it will be a good time. ///

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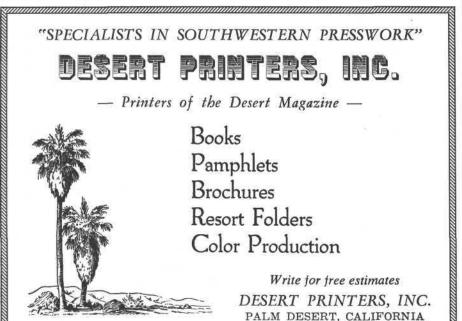
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SOUTHWEST NEWS BRIEFS

¶ The Peerless Oil and Gas Co. and the Midwest Oil Corp. of Denver announced to Super-D.V. Gold intendent Granville Rush Fails B. Liles that they are abandoning their placer mining venture in Death Valley National Monument (see editorial on page 42). In the winter of 1959 newspapers carried banner headlines of a new gold strike in Death Valley when the two companies took out options on 96 claims covering almost 15,000 acres on the floor of Death Valley in the southern portion of the Monument. Discovery pits were dug in the Amargosa River valley gravels by using heavy construction equipment. Some of the pits were over 200 feet wide, 40 feet deep and 200 feet long. Prospecting and mining in National Park Service areas is permitted in only a few instances. In the case of Death Valley, Congress authorized prospecting and mining in 1933, subject to surface use by general regulations as prescribed by the Secretary of the Interior. Since no minerals of value were found in this current gold rush, Peerless Oil and Midwest Oil are backfilling all of their discovery pits in an attempt to restore the area to its original condition.

Training
Indian Artists

objective the establishment of facilities for training Indian artists. The University will use the money to try to learn what type of formal training in art will most benefit the young Indian with artistic talent.

Arizona State University was awarded a \$10,600 grant by the National Science Foundation to compile a complete classification tion of the scorpions throughout the world. Dr. Herbert L. Stahnke (see page 19), director of the university's poisonous animals research laboratory and head of the division of life sciences, will direct the project.

¶ New directional and informational signs have been installed at the Where a River Was Forded "Crossing of the Fathers" site near Glen Canyon Dam. A National Park Service spokesman

said that tourists will now be able to easily locate the spot where the Spanish priests Escalante and Dominguez made the first recorded crossing of Glen Canyon in the year 1776. The road to this historic crossing turns off U.S. 89 about five miles north of Glen Canyon Damsite. The narrow dirt road, approximately 20 miles long, has many blind corners. It can be negotiated with caution by ordinary passenger cars.

¶ The Hercules Mining Company of Nevada has purchased outright the Union Mine, one of Mine To Be Austin's most famous Re-opened producers. Hercules officials said an immediate start would be made to get equipment on the ground preparatory to clearing the old shaft. The Union was the last of the numerous mines in the Austin area to operate prior to the complete shutting-down of the entire district. At that time the operators were shipping ore averaging 1000 ounces of silver per ton.

¶ Skin diving for gold in California's

streams has become increasingly

popular during the Skin Diving past few years, the For Gold state's Division of Mines reports. This is closely associated with the general increase in interest in small-scale placer mining by weekend prospectors, vacationists, tourists that recurs annually in the state. Many of the major California streams have been prospected by skin divers, and several strikes have been made where small but highgrade concentrates in holes and crevices in the stream beds have yielded as much as several hundred dollars worth of gold. Although considerable publicity has been given to these strikes, the number of such discoveries has been few, and the amount of gold produced by this type of mining is small, the Mines Division noted. The value of production from skin diving in the state is unknown, but it is estimated to amount to only a few thousand dollars annually. Gold production figures for California have shown no increases since skin diving for gold has become popular. Occasionally a few skilled divers have made exceptionally good wages from this type of mining for short periods of time, but the majority of those who pursue it do so as a hobby.

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At last—a mineralogy book with big pictures of specimens, and in this book not only are the illustrations big, they are good, too. "The purpose of Minerals and Rocks," say the publishers of this handsome 96-page volume, "is to present to the eye and mind of the reader the beauty and orderliness of the mineral world."

This is essentially a book of photographs, the specimens coming from the British Museum and the Museum National d'Histoire Naturelle (France). Page size of this volume is 734x10½ inches. Many of the photographs appear in color.

Brief text is by H. W. Ball; and Minerals and Rocks also has a Table of Elements. The List of Illustrations includes the origin of the names and locality where specimens were found. This handsome book sells for \$4.95. (Details on how to order books by mail are found in the footnote on this page).

BOOK FOR ROCKHOUNDS WHO WANT TO GO INTO BUSINESS

Arthur Victor and his wife, Lila Mae, are in the gemstone business in the Northwest. They receive many letters beginning with some variation of the theme: "We are just starting a rock shop—can you help us?"

After years of setting forth information for rockhounds interested in going into business for themselves, the Victors put all

of their know-how into a booklet: So You Want To Start A Rock Shop. The 52-page paperback covers the field: from "Requirements of a Rock Shop Proprietor" to "Honesty In Business." There are chapters on "Insurance," "What About Credit," "Location and Size," "Competition" and many others. The book sells for \$2—a good investment for those hobbyists who dream of the day when they can move into that little shop of their own.

Another \$2 Victor booklet—Gem Tumbling and Baroque Jewelry Making — has gone into its sixth printing. It is authoritative, and contains some illustrations. Both books can be purchased from Desert Magazine Book Store—see footnote for details.

FANCIFUL DESERT TALES FOR YOUNGSTERS

Colorful and fanciful tales about some of the animals of the Southwest make up *Peetie the Packrat*, a book for youngsters from 6 to 9 years of age. Written by Van Clark, the 108-page hardback tells in good-sized type about Peetie and Sidney Centipede, Tabasco the Prairie Dog and Benny Buzzard, and a host of other desert characters that live in and around Navajoland.

Best part of the book are the beautiful four-color and black-and-white illustrations by the famous Indian artist, Andy Tsinajinie.

The Peetie book sells for \$5. It can be purchased through the Desert Magazine Book Store, with details listed at the end of this column.

JAMES REAVIS AND THE PERALTA GRANT

Donald M. Powell, head of the reference department of the University of Arizona library, has written a book about James Addison Reavis — the man who tried to swindle half the land of Arizona with forged land grants and other documents. (See page 22 of this issue for a feature article on Arizona's "Bogus Baron" by Phoenix author Oren Arnold.)

Powell's 186-page book, called *The Peralta Grant*, moves effortlessly through the long and involved groundwork for the swindle; the court trial, as can be expected in so bizarre a case, contributes its share of interest.

Reavis was an extraordinary man. His attempt to steal 7500 square miles of land (including the cities of Phoenix, Casa Grande, Florence, Safford and Morenci) must rank as one of the world's greatest crimes. But, the incredible thing about the Reavis-Peralta story is that the man almost succeeded. This speaks volumes for the state of affairs in the West of 1882.

The Peralta Grant is well done and a book worth owning. It contains illustrations, maps, bibliography and index. Price is \$3.75 from Desert Magazine Book Store (see footnote).

*

Books reviewed on this page can be purchased by mail from Desert Magazine Book Store, Palm Desert, California. Please add 15c for postage and handling per book. California residents also add 4% sales tax. Write for free book catalog.

A LONG WEEKEND IN SOUTHEASTERN UTAH

By FRANK JENSEN

Desert Magazine's Utah Travel Correspondent

HEN YOU get to Bluff, look up Ross Mussleman." I remembered this advice and found myself shaking hands with a slow-talking angular man with a mass of red hair. "Mussleman's the name," he said, "but everyone calls me Rusty."

Mussleman's Cow Canyon Trading Post is typical of the "wilderness stores" in the Four Corners country—a rustic rock-faced building framed by a porchlike veranda, a few Indians idly gossiping in the shade.

To step inside such a trading post is to turn back the clock 50 years. Old fashioned horse-collars, coal oil lamps, scrub-boards and heavy sadirons from grandma's day hang from the walls and rafters, and line shelves in a disorderly array.

In addition to his duties as trader, Mussleman is also official census taker for the southern-end of San Juan County, Utah's largest county and probably the most sparsely populated area in the West. For some authentic yarns on modernday pioneering, listen to Rusty tell how he counted noses in his neck of the woods. He did much of his census work on horseback, a mode of transportation that is almost second nature to Mussleman, for he has spent many years guiding dude riders through the San Juan back country.

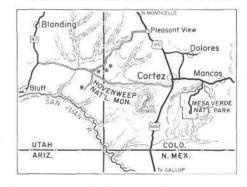
Since Rusty knows everyone in Bluff and probably every soul within a 200-mile radius, he was the ideal guide for me. Together we toured the tiny town, and from my host I learned that Bluff was founded in the early 1880s when more than 200 Mormon emigrants drove their wagons into the valley of the San Juan River. The story of the San Juan mission stands alone as an epic of Southwestern settlement. The relatively short trek took nearly two years to complete because of the rough terrain that had to be crossed. Climax of the difficult journey came at famed Hole-in-the-Rock where the Colorado River was forded. Direct descendants of those pioneers who made

the strenuous passage are referred to today as "Hole-in-the-Rockers." It is an appellation they bear with pride.

Bluff has lived more lives than you would suspect at first glance. At the turn of the century came a gold rush. For nearly four years all the business transacted in Bluff was done so in gold dust or retorted gold. From 1908 to 1912 the town was the scene of the first oil exploration in Utah. Wildcat drillers and cattlemen rubbed shoulders to produce a bit of Texas prosperity in the San Juan. Bluff was the wealthiest town per capita in the state—and then came the long decline.

As late as 1953 only a pair of wheel tracks in the sand linked Bluff with the outside world. Less than three years ago there were only two telephones in town. But the recent uranium boom is being followed by a resurrection of the even more promising oil boom—and once again Bluff is on its way!

This town is a gold mine for the traveler



Hard Rock Shorty

of Death Valley



Hard Rock Shorty shook a lazy fly off his shoe, and turned to the tourist who had stopped at the Inferno Store for gasoline.

"Alasky license plates," observed Shorty. "Snow up your way yet?"

"It's always snowing t'home," answered the stranger. "That's why we came down here t' Death Valley this year."

"Ha!" snorted Shorty. "Don't buy no sun-tan oil yet. It snows here too."

"No!"

"Yep-we got th' most peculiar irregular weather in th' world-right here."

And Shorty was off on another yarn: "I 'member back in '14—th' last day of August. Pisgah Bill and me waz snowed-in up at our camp in Eightball Crick, and we had a big order o'

autumn supplies awaitin' us right here at this store. Lots o' things that coulda spoiled, so we hada work fast.

"First we takes the wheels off'n the wagon. Then we forge some runners and bolt 'em to th' axles. Last we hitch th' mule to what is now a genuine sleigh, and away we go—jest like in th' Christmas cards.

"We slid into Inferno O.K. fact is it waz easy. But halfway home a hot blast o' air commences blowin' out o' th' south. Thet snow melted quicker'n it takes to tell.

"Th' road up th' canyon is cut through solid flint, an' drivin' up it them metal runners 'neath th' wagon start tossin' out sparks. By th' time we got to th' cabin, our rig had set 18 brush fires, two forest fires and burned off th' poor mule's tail."

On my visit to Hovenweep I met John Ripley, genial superintendent of the national monument. As we sipped coffee at Park Headquarters, which also serves as the superintendent's residence, Ripley was enthusiastic about development plans for Hovenweep, which include a visitor center and paved roads into the monument.

A Visit to Hovenweep Monument

who prefers roughing it a bit. In fact, you could spend two life-times in the San Juan

and still lack the time to see it all.

Bluff is the "gateway" to Hovenweep National Monument straddling the Utah-Colorado line. Travel distance from Bluff is about 45 miles. These ancient Hovenweep towers, which are D-shaped, round, oval and square, are outstanding examples of the defensive architecture of late pueblo times.

Hovenweep was inhabited from about 1100 to 1376 A.D. by a group of farming puebloans. For five centuries prior to 1100 these people lived in peace and security. It wasn't until the nomadic tribes began drifting into the Southwest that the puebloans deserted their farming villages for the fortified pueblos.

Hovenweep was set aside as a National Monument in 1932. The name comes from the Ute Indian word meaning "deserted valley," first applied to this site in 1874 by the pioneer photographer, William H. Jackson.

A Pleasant One-Day River Cruise

Originally, I had planned to spend two hours in the Bluff area—and now I was in my third day. I decided to top off my "vacation" with a one-day river cruise.

The evening before—in order to get into the mood for my voyage—I sat down to a plate of fried shrimp at Bluff's only eating house. The town has twice as many motels—two. One of them, the Recapture Court, was named by its owner Keith Jones for the Morrison Formation which is, geologically speaking, recaptured in the Bluff sandstone. Jones, it seems, is an amateur geologist.

Next morning I met Kenneth Ross, a

FROM

veteran riverman who has been running the San Juan and Colorado rivers since 1932. Lean and tanned, Ross looks every inch the accomplished boatman he is. He holds a Ph.D. in archeology, is a former Park Service naturalist, and has spent a major part of his life digging in Indian ruins.

We shoved-off from a sandy beach above Bluff. Sand waves, a phenomenon of the silt-laden San Juan (the waves actually travel upstream), added to the excitement of the launching. Our waves were less than four feet high, although they sometimes rise to 10 feet or more to test the skill of even the best boatmen, my guide explained.

The 33-mile trip from Bluff to Mexican Hat provides everything the river has to offer, and is as safe as riding in the family car. It takes about seven hours to make the jaunt. The cost of the trip, \$12.50 per person, is within easy reach of the average pocketbook.

We stopped along the way to explore cliff dwellings abandoned more than 800 years ago. Steps chipped out of the rock provided footholds for the ancient dwellers of the San Juan.

If you happen to be a rock collector or amateur geologist, you'll especially enjoy this river for it is an open book of the earth's history. The San Juan has gouged a canyon nearly 2000 feet deep. Some of the rocky layers date back 200,000,000 years to a time when the spiny trilobite dominated the oceans of the earth.

The day's run was climaxed by an exhilarating ride through the rapids. The going was a little wet, and most refreshing.

A Utah attraction in August are the World Land Speed Record attempts and speed trial runs at the Bonneville Salt Flats west of Salt Lake City. These runs will be held from the 7th to 27th of the month. The 29th annual Uintah Basin Industrial Convention and All-Indian Pageant will be held August 3-5 at Roosevelt. On the 12th and 13th, Bountiful holds its annual Sidewalk Days celebration. The Cache County Fair takes place at Logan, August 18 to 20. August 21-23 are the dates for the Washington County Fair at Hurricane. Juab County Fair at Nephi is scheduled for August 30-31 and September 1.

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- OUT-OF-print books at lowest prices! You name it—we find it! Western Americana, desert and Indian books a specialty. Send us your wants. No obligation. International Bookfinders, Box 3003-D, Beverly Hills, California.
- BOOKS: "PANNING Gold for Beginners," 50c.
 "Gold in Placer," \$3. Frank J. Harnagy, 7011/2
 E. Edgeware, Los Angeles 26, California.
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• GEMS, CUT - POLISHED

- FOR YOUR collection—Florida's beautiful coral agate. Send one dollar (no tax) for polished specimen to The Agatery, 851 Bay Point Drive, Madeira Beach 8, Florida. Money back if not satisfied.
- AUSTRALIAN TUMBLED gemstones, 8 different polished baroques, identified, suitable for necklace or chain bracelet. \$1.10 postpaid. Or 10 different polished baroques, identified, from around the world. \$1.25 postpaid. Bensusan, 8615 Columbus Avenue, Sepulveda, California.
- GENUINE TURQUOISE: Natural color, blue and bluish green, cut and polished cabochons—25 carats (5 to 10 stones according to size) \$3.50 including tax, postpaid. 50 carats (10 to 20 cabochons) \$6.15 including tax, postpaid in U.S.A. Write for folder. Elliott Gem & Mineral Shop, 235 E. Seaside Blvd., Long Beach 2, Cal.
- PERSIAN TURQUOISE: small round cabochons, oriental cut, clear robin's egg blue, 1 mm. to 4 mm. diameter, natural high grade Persian turquoise—\$1 dozen postpaid. These snake-eyes ideal for cementing in clusters. Lost Mountain Gems, 3005 North 39th St., Phoenix, Arizona.
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GEMS, DEALERS

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- NATIONALLY KNOWN and noted for choice varieties of gem stone, minerals, fossils, Indian artifacts, etc., including unusual gifts at reasonable prices. Visitors or correspondence welcome. The Cole's, 551 S. W. Coast Hiway, Newport, Oregon.

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 Supply, Box 1188-D, Ardmore, Oklahoma.
- CHOICE MINERAL specimens, rough and cut gem material, lapidary and jewelry equipment and supplies, mountings, fluorescent lamps, books. Valley Art Shoppe, 21108 Devonshire Street, Chatsworth, California.
- NEW LOCATION, new store: everything for the rock hounds, interesting gifts, minerals, slabs, rough material, lapidary supplies, mountings for your cabs. Stop and see us. Shamrock Rock Shop, 593 West La Cadena Drive, Riverside, California. OVerland 6-3956.

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- BEGINNERS ILLUSTRATED catalog. Specialized mineral, gem, crystal, fossil study collections; chemical, blowpipe, ultraviolet test kits, manuals, field guides, other beginner accessories. 25c. Mineral Lore, 3004 Park Avenue, San Bernardino 2, California.
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TRADING POST CLASSIFIEDS

continued

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 Dealers write for prices on baroques. Roy's
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- ROCK HOUND headquarters: Moqui Motel, Escalante, Utah on Highway U. 54, phone MArket 4-4210, Dyna and Mohr Christensen. Pack and Jeep Trips by appointment.
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- FOR INFORMATION on desert acreage and parcels for sale in or near Twentynine Palms, please write Silas S. Stanley, Realtor, 73644 Twentynine Palms Highway, Twentynine Palms, California.

TRADING POST CLASSIFIEDS

- FOR SALE: Rock shop and Indian trading post, Los Angeles area, established five years, splendid location, fully equipped, 31 machines. Must sell due to ill health. Sell all or part. \$6000 full price. \$3000 will handle. Box MT, c/o Desert Magazine, Palm Desert, Calif.
- HOTEL AND cafe in Johannesburg, California.

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Desert Gardens



Have A

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By Louise Price Bell



ESERT home-owners know that there's no reason why you can't have a "tailored" garden just because your home sets smack-dab in lovely virgin land. Many a desert-dweller, transplanted from other and more lush parts of the country, has had new and fascinating experiences developing a little patio or garden just over the wall from cacti-studded desert. (In our own case, we moved to Tucson from New York State and have had much satisfaction from creating a little spot in our pocket-handkerchief patio while all about our home the beautiful desert prevails.)

Landscaping, as such, is much more harmonious and in keeping with the locale if it is done with desert plants. And there are so many dramatic ones that can be used, that getting the right ones is no problem. Cacti of all kinds are practically foolproof — and interesting; ocotillo is effective— and gorgeous when in bloom; nothing can compete with the stately palm tree that grows so well throughout the desert belt.

That is why many home-owners use desert growths to surround their homes, adding native stones occasionally, bringing in desert - flavored artifacts that weren't on the land when they built or bought their homes. Lawns can be created by bringing in extra top-soil and being generous with water, and the same is true if one wishes to augment desert plants with lush greener ones.

It is no wonder that desert living is so pleasurable when one can sit on terrace or porch and look out over a small area of garden, planned and executed by one's own hands, to miles and miles of virgin desert. Such views are ever-changing and become so much a part of one's being that "once a desert-dweller always a desert - dweller" is a statement that belies contradiction. It doesn't matter whether one's home is a simple little 'dobe hut, or a more elaborate home-the same facts hold true! 111

NEW MEXICO IN AUGUST: INDIAN DANCES, HISTORICAL PAGEANTS

By W. THETFORD LeVINESS

Desert Magazine's New Mexico Travel Correspondent

HISTORICAL PAGEANTS vie with Indian dances and Spanish fiestas as top tourist attractions in New Mexico in August. One of these, "The Last Escape of Billy the Kid," is scheduled for three nights, August 5, 6 and 7, at Lincoln, in the heart of the New Mexico cow country.

Lincoln, 32 miles east of Carrizozo on U.S. 380, was the scene of a bitter cattlemen's fight in frontier days, the "Lincoln County War." Billy the Kid was prominent in the shooting and was sentenced to be hanged there in 1881. The legal necktie party didn't quite come off. Two weeks before the execution date, Billy, whose real name was William Bonney, killed two guards and escaped on a horse. It was one of the most spectacular daylight jail-breaks in the history of the old West. Lumber intended to build the Kid's gallows was used instead to make coffins for the guards. The daring outlaw was killed by Sheriff Pat Garrett at Fort Sumner later the same year—but that isn't a part of the pageant.

The 10 scenes combine the "mellerdrammer" of the silent-movie era with the bloodiest of TV "westerns." They open with a procession to the village church and a lively fiesta, interrupted by outlaw horsemen and—murder. The gory battles that follow leave Billy with wounded pride—armed and dangerous. "The War Is Over—but Not the Kid's Desire for Vengeance" is the title of Scene VII; then comes the capture, the imprisonment, and the climactic escape. Billy the Kid—a ruthless killer with a notch on his gun barrel for each of the 21 years of his life—emerges as a bandit hero. As indeed in legend he is.

Historical markers line both sides of Lincoln's lengthy main street. The building that served as courthouse and jail at the time of the fighting has long been a state monument. It is administered by the Old Lincoln County Memorial Commission, which now owns many of the other structures that figured in the fracas. Two years ago the Tunstall store, stronghold of one of the warring factions, was made into a museum; and early this year the Wortley Hotel was reconstructed as the old town's only sleeping quarters. It offers rooms and meals to travelers today—the first accommodations of its kind in Lincoln in modern times.

North in the vicinity of Santa Fe and Albuquerque the Pueblo Indians hold several of their most colorful *fiestas* in August. These are set for Jemez, August 2; Santo Domingo, on the 4th; Picuris, 10th; Santa Clara, 12th; Zia, 15th; and Isleta, 28th. The biggest is at Santo Domingo, where as many as 600 native villagers participate in the day-long Green Corn Dance, perhaps the most elaborate ritual in America to survive from ancient days.

Also, the world-famous Gallup Intertribal Indian Ceremonials are held in August—the 11th thru 14th this year. Gallup is on U.S. 66-666 near the Arizona line. Navajos from their reservation near-by camp corral-style in covered wagons on hills overlooking the city and its great ceremonial arena; their dance teams compete with those of many other tribes for the coveted prizes. Visitors always include hundreds of Pueblo and Apache Indians from New Mexico and Arizona; Alaska tribes and Aztecs from Mexico have been represented as well. A special building near the arena houses Southwestern Indian arts and crafts—all for sale and much of it entered in competition



LINCOLN COURTHOUSE, RESTORED TO ITS OR-IGINAL APPEARANCE, IS A STATE MONUMENT

for prizes. Overflow crowds are expected for the full four days of the ceremonials; those desiring overnight accommodations in Gallup at that time should make their reservations well in advance.

At Bernalillo, on U.S. 85 north of Albuquerque, it's fiesta on August 10, and time once more for the dramatic and highly stylized dance of the Matachines. A direct descendant, choreography-wise, from medieval morality plays in Spain, it came into the Southwest from Mexico, where the "good over evil" theme meant Christianity over paganism—Cortez' triumph over Montezuma, specifically.

Numerous horse shows and rodeos round out a full month of tourist attractions in the Sunshine State. Carlsbad Caverns National Park lists several conducted tours daily, and in Taos there are two plaza-topueblo stagecoach trips a day.

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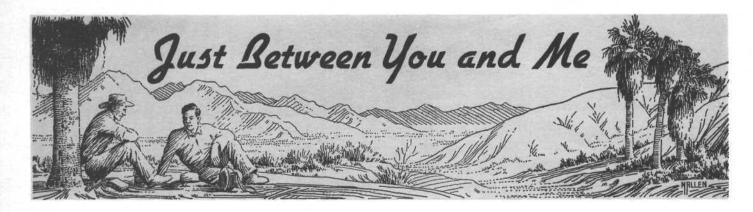
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By RANDALL HENDERSON

AST MONTH I reported that huge power equipment was excavating great holes in the Death Valley National Monument in an exploratory effort to tap a reportedly rich placer gold field. Some of these excavations were 20 feet wide, 40 feet deep and 200 feet long.

It proved to be a false lead. The Amargosa River gravels in the southern part of the Monument yielded no minerals of any value. And I am glad to report that the Peerless Oil and Gas Company and the Midwest Oil Corporation which had acquired an option on 96 claims covering about 15,000 acres have abandoned their venture and are backfilling the pits in an attempt to restore the landscape.

In most of the National Parks and Monuments wild-catting of this kind is prohibited. The Death Valley episode serves to emphasize the need for similar protection in California's largest National Monument. To the superficial observer Death Valley is just an arid and forbidding desert. But to those who come to this region with interest and understanding it is a great natural museum wherein are revealed the miracles of countless years of geological upheaval and erosion, of plant and wildlife adaptation, and of habitation by hardy aborigines whose story is partly told in the re-discovered artifacts of their culture. The charm of Death Valley is in its fantastic form and color—and in the mystery of its past. Why any living thing, plant or animal, would chose such an inhospitable habitat is one of the enigmas of life on this planet.

It is to be hoped that before too long the federal government will give this region the status and the protection of a national park.

Probably we folks who dwell on the desert are more sensitive to problems of water conservation than are those whose homes are in zones of more abundant rainfall. I'll confess that one of the reasons I have never developed any enthusiasm for the idea of planting a colony on the moon is that whenever I read about these schemes for outer-space exploration my personal reaction is: Gosh, I wish they would be spending that money on the development of an economical process for the desalting of sea water.

For water supply truly is a problem which will plague future generations of Americans. In fact, the threat of shortage already is a matter of grave concern to many American communities. Here in California we are to vote next November on a project which eventually will involve the expenditure of billions of dollars for bringing water from Northern California to Southern California.

It seems to be a necessary investment, but Southern California has the biggest pond in the world lapping at its shoreline and I still think that scientists who are smart enough to harness the atom could solve the problem of converting sea water not only for this state but for coastal areas all around the world if they were given the green light and the funds for large-scale research.

This will be vacation month for many Desert Magazine readers—and I want to remind them that three of the most colorful national parks in the nation are located in the Desert Southwest. I refer to Zion and Bryce parks in Utah and Grand Canyon in northern Arizona. They are all at an altitude where you'll sleep under blankets even in midsummer.

The landscapes in these parks are majestic—but there is something more than awe-inspiring scenery to make the vacation worth while. Don't invest your money in a park trip and then pass up the lectures of the ranger-naturalists. That's like buying a meat pie and eating only the crust.

The national park system is something more than a series of scenic attractions for rubberneck tourists. It has developed into a great outdoor university where Americans on vacation may enrich their lives with an intimate and fascinating study of the simple but important truths of the natural world.

One of the most delightful spectacles on the annual calendar of desert events will take place at Prescott, Arizona, on August 13. I refer to the annual Smoki Dances—not to be confused with the Hopi Snake dances which also will take place in August on the Hopi Indian reservation.

The Smoki people are a rare tribe. They are white folks who sell groceries and practice law and pump gasoline and sell insurance for a living—just a cross-section of an average American community. Once a year they stage one of the most realistic pageants in America.

Aside from the impressiveness of the show, the most amazing thing about these people is their modesty. Imagine if you can a troupe of actors and actresses who shun publicity. It is contrary to all American custom. At Hollywood the third assistant costume girl must have her name flashed on the screen, and the extra players hire press agents to keep "their public" informed as to their doing. But at Prescott you can sleuth around the town for a week without even learning the names of those who play lead roles on the Smoki ceremonial.

It is a refreshing experience to find a troupe of performers so good they do not have to resort to ballyhoo to hold their jobs.



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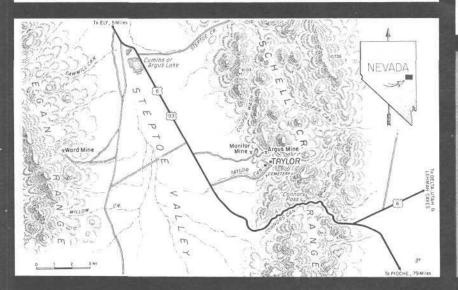
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